This document will be used by Forest Service (FS) employees to implement the Foothills Landscape Project by tiering projects to the Programmatic Environmental Assessment and Final Decision (forthcoming). Following the process outlined below will:

- Demonstrate regulatory compliance with all overarching law, policy and regulation.
- Aid in determining when/if additional analysis under National Environmental Policy Act (NEPA) is warranted for any actions within a given Implementation Area (IA) of the Foothills Landscape.
- Ensure public engagement with stakeholders occurs throughout the lifecycle of the project.
- Provide planning consistency across FS units.
- Result in an Implementation Plan(s) that documents the locations and timing of management actions, applicable mitigations (project design features) and adheres to the Final Programmatic Decision Notice (DN). These implementation plans should provide adequate documentation required under NEPA for subsequent public scoping and if needed, tiered analyses and/or decisions.

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Implementation Area: Mooneyham

Ranger District: Conasauga

Step 1: Forest Identifies all Management Opportunities within Implementation Area *Instructions:* District Interdisciplinary Teams (IDTs) will consult the <u>Environmental Assessment</u>, <u>Decision Notice</u> and <u>Forest Plan</u> to identify potential project-level activities for the IA that are consistent with analysis and management direction.

- A. IDTs will identify the desired conditions throughout the IA by reviewing applicable management prescription (MRx) objectives and standards per the Forest Plan and characterization of current conditions based on existing data sets (i.e., FSVEG spatial, etc.) Examples include, but may not be limited to:
 - What MRx are present? Suitable or unsuitable for timber production?
 - What sixth (6th) level watersheds are present? Watershed condition class? Percent Total Impervious Area (TIA)?
 - Scenic Integrity Objectives?
 - Known road or access issues? Illegal off-road problems?
 - Impaired streams, known sediment, or Aquatic Organism Passage (AOP) issues?
 - What vegetation treatment opportunities are present (GIS queries)?
 - What successional conditions are present? How many acres of young forest could be created?
 - Do some stands meet minimum old growth age? Does the IA need old growth small blocks?
 - Known recreation or trail issues/ concerns?
- B. IDT will review proposed actions (EA Table 17 & Appendix B) and select all appropriate management actions available and needed to achieve desired conditions within the IA, noting which are identified for implementation directly from programmatic DN versus those requiring further review.

Throughout the implementation planning process, if at any point the IDT discovers/ determines an action is needed or a condition exists that was not accounted for in the analysis, additional disclosure and NEPA would be triggered.

C. Summary of proposed actions covered in this Implementation Guide

Plan Summary

Activity Name (should correspond	Location (i.e., HUC, Compartment Stand, and	Draft Acres and/or miles	Final Acres and /or miles	Anticipated year(s)
w/ Table 17 of EA)	or Geographic	of road/trails,	of road/trails,	implementation
	Description)	etc.	etc.	would begin
Stream habitat	Comp 716 – Perry Creek	2.3 miles		2025
improvements –	Comp 714 – Bogden			
large woody debris	Creek, Gizzard Branch,			
	unnamed tributary to the			
	Conasauga River			
Continuation of	Mooneyham Rx Burn –	724 ac		2024
Prescribed Burning	Comp 715, 716;			Turkeybeard;
within Existing Blocks	Turkeybeard Rx Burn –			2027
	Comp 714			Mooneyham

Decommissioning of ML2 and ML1 system roads	FSR 1 Doogan Mountain Rd from intersection of Iron Mountain Trail to end of road	1.3 mi	2023
Implement changes to system road ML and or use restrictions – reduce ML	FSR 1 Doogan Mountain Rd from start at Old Hwy 2 to Iron Mountain Trail	1.2 mi	2023
Restoration of southern yellow pine forest on dry sites dominated by mid to late-successional Virginia or white pine – 2 aged regen harvest	Comp 714 Stand 11; Comp 715 Stands 3, 13; Comp 716 Stand 25	128 ac	2023-2030
Restoration of southern yellow pine forest or oak forest on sites currently occupied by off-site pine plantations or failed shortleaf or pitch pine plantations – 2 aged regen harvest	Comp 716 Stands 10, 22, 24	59 ac	2023-2030
Maintenance of oak forest – commercial thinning	Comp 716 Stands 3, 4	49 ac	2023-2030
Commercial thinning of pine plantations to improve forest health	Comp 712 Stand 20; Comp 715 Stands 17, 18; Comp 716 Stands 1, 13, 20	151 ac	2023-2030
Create young forest (ESH) by daylighting roads and permanent openings – two aged regen harvest	Comp 716, 50 ft width corridor following FSR 151	8 ac	2023-2030
Restoring open woodland habitats on appropriate sites – noncommercial thinning	Comp 714 Stands 14, 19, 42	66 ac	2023-2030
Maintenance of oak forest – midstory reduction	Comp 714 Stands 4, 10, 13, 21; Comp 716 Stands 8, 9	181 ac	2023-2030

Non-commercial thinning of pine plantations to improve forest health	Comp 716 Stand 19	38 ac	2023-2030
Replacement of culverts, fords, or bridges to increase aquatic organism passage (AOP) and function	Comp 716 – one on FSR 151, two south of forest boundary on private property; Comp 714 – two on FSR 1A	5 AOP sites	2023-2030
Prescribed fire in new burn blocks to facilitate restoration or maintenance of fire-adapted ecosystems or to reduce hazardous fuels	Halfway Branch Rx Burn – Comp 714; Iron Mountain Rx Burn – Comp 714, 712; Mooneyham Extension Rx Burn – Comp 716	958 ac	2023 Halfway Branch; 2025 Iron Mountain; 2027 Mooneyham Extension

Step 2. Complete Initial Field Reviews and Validate Thresholds for Proposed Action

Instructions: Specialists should review the IA and complete their relevant checklist below. Information and documentation, if needed, should be included with this document. Once review is complete, and all specialists have signed, move to Step 3.

NOTE: It is the responsibility of the FS resource specialists to ensure **a)** the applicable steps below are followed, **b)** findings are communicated to IDT/ Line Officer, and **c)** resulting information is carried through accordingly and documented in the draft Implementation Plan for the IA.

Some of the following procedures may be repeated as planning evolves or deferred until sufficient information becomes available and it is prudent.

Aquatics and Terrestrial Wildlife

⊠Review existing data to determine known locations of Threatened and Endangered (T&E) species, designated critical habitats, Regional Forester's Sensitive Species, or locally rare species (i.e., consult Georgia Department of Natural Resources (DNR) spatial database (DNR-WCS) on AGOL, FS GIS shapefiles and other applicable records.). As part of the above process and specific to Terrestrial Wildlife, also:

- Consult with Georgia DNR for current range information for all federally listed bats to determine applicability of Forest Plan standards at: https://georgiawildlife.com/BatSurveyGuidance
- Review current spatial extent of suitable Indiana bat roosting/ maternity habitat in IA.
- Consult with Georgia DNR to verify current information about known roost trees or hibernacula for NLEB (northern long-eared bat) in IA.

☑ Obtain updated official species list from IPaC (Information for Planning and Consultation) for the project area at: https://ipac.ecosphere.fws.gov/. If new species are listed and present in IA and could be affected by the proposed action, consult with US Fish and Wildlife Service (USFWS)/ supplement NEPA accordingly.

List Date IPaC pulled: 7/20/2022

- ☑ Identify potential AOP opportunities (in conjunction with Forest Soil Scientist and Engineer).
- FLP Specific: When increasing aquatic connectivity by removing barriers to aquatic organism passage, it should be noted that some barriers are beneficial in preventing encroachment of non-native species or movement of native species. The potential for negative consequences of removing a barrier should be evaluated on a case-by-case basis.
- ☑ Identify known issues that are contributing to decreased habitat quality (i.e., sediment sources, riparian function, increased water temperatures, etc.).

- ⊠ Review existing data to determine presence or potential of priority wildlife species such as migratory songbirds, game species (i.e., consult DNR-WRD, Game Management, Region 8 bird records).
- ☑ Consider opportunity or need for wildlife habitat improvement, especially in conjunction with commercial vegetation treatments such as:
 - Permanent openings acres in the project area. Consider creation or expansion (could create up to 1% of NFS acres per 6th level HUC).
 - Opportunities for daylighting selected system roads.
 - Opportunities for pollinator habitat improvement.
- ☐ The project design must comply with the following project design features:
- Forest Plan Standard FW- 009: Known black bear den sites will be protected from disturbance by a buffer of a minimum of 100 feet.
- Forest Plan Standard FW- 010: Potential bear den trees (greater than 20-inch diameter at breast height (dbh), hollow with broken tops) will be retained.
- > FLP Specific: Within individual project areas to be implemented within the Foothills
 Landscape area, an assessment of existing acres of permanent openings would be completed
 prior to implementation to determine the maximum allowable acreage of new openings (up
 to 1% of the National Forest acreage in each 6th level watershed). Permanent openings
 would be managed as traditional grass/forb (food plots), shrub, native grass/forb, or
 pollinator habitat as appropriate for the site.
- > FLP Specific: When feasible, native plants that support pollinators would be planted on the forest where appropriate i.e., including logging decks, wildlife openings, powerline, and road rights-of- way. This would specifically include planting milkweed for monarch butterflies. (Work with interested non-profits and organizations to determine the correct plants to consider and the proper locations to conserve and enhance the pollinator habitat across the landscape.)

☑ If relevant, use space below to list additional survey needs or pertinent information to include in Implementation Plan (i.e., consideration of thresholds for annual reporting of activities affecting endangered bat habitat per Forest Plan standard FW-238, Large Woody Debris opportunities, roads w/in 300′ of impaired streams present, etc.):

The Mooneyham IA is within the range of gray, Indiana, and northern long-eared bat per Georgia DNR current survey guidance. All Forest Plan standards for bat conservation apply. Approximately 289 acres of suitable habitat for Indiana bat exists in the IA. A roost tree utilized by northern long-eared bats is present in the IA, but no actions are proposed in the vicinity of that tree. New information regarding the listing status of the northern long-eared bat and tricolored bat is found on page 7 of this document.

There are 3 potential AOP candidates (culverts) in the IA. The SARP protocol was utilized to rank them regarding their severity as barriers to aquatic passage. Perry Creek includes 1 culvert ranked as a 'significant' barrier, Bogden Creek has 2 culverts ranked as 'severe' barriers. In addition, there are 2 culverts on private land on Perry Creek and an unnamed tributary to Perry. Both are 'significant' barriers.

Several perennial streams which are Conasauga River tributaries would benefit from the addition of large woody debris (LWD).

FS Road 151 (Mooneyham) has good potential for daylighting. Creating a corridor of young forest habitat would benefit pollinators and numerous other wildlife while improving road conditions.

	\square Maps and visual aids have been attached. Level of detail should be sufficient to allow for adequate planning and identification of issues and concerns.
Please	select one of the statements below:
	\Box All activities shown in the draft plan have been reviewed for compliance with the Foothills Landscape EA or other relevant NEPA compliance and my resource. There are no changed conditions at the time of this review.
	OR
	All activities shown in the draft plan have been reviewed for compliance with the Foothills Landscape EA or other relevant NEPA compliance and my resource. There are changed conditions or specific actions that are not in compliance. These conditions or actions are listed below.

A new IPaC list for the Foothills Project Area was requested and received from the US Fish and Wildlife Service on 07/20/22; two additional wildlife species appear since the list was obtained in April 2021 for consideration in the project's Biological Assessment and NEPA analysis:

- Monarch butterfly (Danaus plexippus) is now a candidate for listing as threatened or endangered (12/15/20), but there are no requirements for consultation under Section 7 of the ESA for candidate species. There are voluntary conservation measures which could be undertaken; many of these are included in the Foothills Landscape Project's proposed action (avoiding milkweed during herbicide treatments, prescribed burning on a 3-5 year rotation, planting milkweed and native nectar-producing plants where possible, midstory control when thinning pine stands, creating or expanding permanent openings). The effects of the project on monarch butterfly were considered and disclosed in the Terrestrial Wildlife Report, Biological Evaluation, and summarized in the Environmental Assessment because the species is a Regional Forester's Sensitive Species (RFSS). This new information does not require any further review or NEPA analysis or consultation. This project is likely to benefit this species, however it may impact individual monarch butterflies but is not likely to cause a loss of viability or a trend toward federal listing. This is consistent with the findings in the Programmatic EA and Biological Evaluation.
- Frecklebelly madtom (*Noturus munitus*) is proposed for federal listing as Threatened (11/19/2020). This species was reviewed as a RFSS (Aquatic Resource Report) but was not considered for further analysis in the Biological Evaluation or EA because it does not occur in the project area or within 1 mile downstream. The Foothills Project would have No Effect on this species and this new information does not require any further review or NEPA analysis or consultation.

Bat species reclassified as endangered or proposed for listing as endangered:

- On March 23, 2022, the USFWS published a proposed rule to reclassify the northern long-eared bat (NLEB) from threatened to endangered; this is projected to be finalized in December 2022. The effects of the FLP on NLEB were considered and disclosed in the Foothills Programmatic EA and Biological Assessment, but this change in status necessitates new consultation. In anticipation of this reclassification, Forest Service Regions 8 and 9 have initiated formal consultation with the FWS regarding this species and ongoing projects and previously signed decisions including the Foothills Landscape Project. This formal consultation should be completed by 12/31/22 resulting in a Biological Opinion (BO) and incidental take statement (ITS) covering the impacts of this and other projects. This project would comply with the BO. This project May Affect, Is Likely to Adversely Affect this species; however, there are no effects beyond those covered in the ongoing formal consultation process. The BO and ITS will ensure the continued compliance of the Foothills Landscape Project with section 7(a)(2) of the Endangered Species Act until the new Bat Conservation Strategy for Four Species Affected by White-nose Syndrome on Eastern National Forests (BCS) is finalized. This document includes conservation measures for tricolored bat, Indiana bat, northern long-eared bat, and little brown bat.
- On September 13, 2022, the USFWS proposed to list the tricolored bat as endangered. The effects of the FLP on tricolored bats were considered and disclosed in the Foothills Programmatic EA and Biological Evaluation because the species is on the Regional Forester's Sensitive Species (RFSS) list. This new proposed listing triggers the need for *conference* with the USFWS or *consultation* once listing is finalized, therefore this project is currently in compliance with ESA regarding this species. The above referenced BCS is currently in draft form and will include protective measures for each of the four species. This project will comply with that strategy and resulting BO and incidental take statement. The determination of effect would be that the project May Affect, Is Likely to Adversely Affect this species, but compliance with the anticipated BO and incidental take statement would satisfy the Forest Service's responsibilities under Section 7(a)(2) of the Endangered Species Act.

Signature

Ruth Stokes Biologist

Botanical and Rare Communities (T&E and Sensitive*, NNIS)

- ⊠ Review existing data to determine known locations of T&E species, designated critical habitats, Regional Forester's Sensitive species, or locally rare species (i.e., consult DNR WCS spatial database on AGOL, FS GIS shapefiles and other records).
- ☑ Obtain updated official species list from IPaC for the project area at: https://ipac.ecosphere.fws.gov/. If new species are listed and present in IA and could be affected by the proposed action, consult with USFWS/ supplement NEPA accordingly.

List Date IPaC pulled: 7/20/2022

- ⊠ Review existing data to determine known locations of rare communities (i.e., bogs, caves, rock outcrops).
- ⊠ Review existing data to determine known locations of Non-native Invasive Species (NNIS); If needed, utilize risk assessment and conduct botanical surveys and NNIS assessment to determine if individuals or populations occur once activity locations are known.
- ⊠ Communicate known site locations to IDT for avoidance (i.e., protected information for internal planning purposes only).
- ☐ The project design must comply with the following project design features:
- FLP Specific: Known populations of T&E, Sensitive and LR plants would be protected by placement of a buffer zone around them where possible. The appropriate measures would be determined in coordination with U.S. Fish and Wildlife Service and Georgia Department of Natural Resources.
- ☑ If relevant, use space below to list additional survey needs or pertinent information to include in the Implementation Plan (i.e. additional opportunities for unique habitat work):

A botanical survey of the Mooneyham IA project area was completed in June and August 2022. The contractor located populations of 2 RFSS plant species.

- Eastern turkeybeard (Xerophyllum aspheloides) was previously known to exist, but many more plants were located and mapped. This species would benefit from continued prescribed burning and other actions such as midstory removal or canopy to provide more sunlight.
- Small spreading pogonia (Cleistesiopsis bifaria) was found in one stand during surveys. This species is adapted to fire and benefits from prescribed fires that reduce overstory trees and shrubs to maintain open conditions. If commercial timber harvest operations are planned, individual plants will be protected from impacts during timber sale operations by Special Area provisions. This will be designated on the ground by banding selected trees surrounding the plants with white paint and by designation on timber sale contract maps with Special Area symbology.

The implementation of the Mooneyham IA project may benefit these rare plant populations but may impact individual eastern turkeybeard and/or small spreading pogonia but not affect population viability or lead to federal listing of either species. This is consistent with the findings in the Programmatic EA and Biological Evaluation.

	adequate planning and identifcation of issues and concerns.
Please	select one of the statements below:
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	OR
	☑ All activities shown in the draft plan have been reviewed for compliance with the Foothills Landscape EA or other relevant NEPA compliance and my resource. There are changed conditions or specific actions that are not in compliance. These conditions or actions are listed below.

☐ Maps and visual aids have been attached. Level of detail should be sufficient to allow for

The new IPaC list for the Foothills Project Area was requested and received from the US Fish and Wildlife Service on 07/20/22; one additional species was added since the list was obtained in April 2021 for consideration in the project's Biological Assessment and NEPA analysis:

Tennessee yellow-eyed grass (*Xyris tennesseensis*) is federally-listed as endangered. It is a wetland plant with no known occurrences in the Foothills Landscape Project area. We have reached out to Georgia DNR botanist Carlee Steppe for information about why the species was added to the IPaC list for this project. She confirmed that there are no new occurrences of the species in the project area. The most likely explanation for the listing on IPaC is that there is a new occurrence outside the project area but in one of the 8 counties encompassing the Foothills Project boundary. This project would have **no effect** on Tennessee yellow-eyed grass or any wetland habitats.

Signature Ruth Stokes Biologist

Cultural Resources

Archaeologist gathers relevant cultural resources data for IA, determines maximum survey needed, and notifies tribes and Georgia State Historical Preservation Office (SHPO) of proposed undertakings and cultural resources work. Tribes/SHPO have 45 days to review.
☐ Archaeologist gathers relevant cultural resources and plant species data and provide to tribes for 60-day sacred site review. Once consultation completed, begin surveys and required mitigations.
\Box Communicate known site locations to IDT for avoidance (i.e., protected information for internal planning purposes only).

- FLP Specific: Cultural Resources sites with an eligible or undetermined National Register of Historic Places status will be avoided and protected from project effects. The standard avoidance method will consist of a 100-foot protective buffer around each site, or as determined through consultation with the Georgia State Historic Preservation Officer and interested Tribes.
- Forest Plan Standard FW- 208: Manage heritage resources in accordance with applicable federal laws, regulations, policy, agreements, and in the public interest. Emphasize the protection of significant heritage properties, completion of the forest wide inventory, and assessment of the significance of inventoried properties. Identify opportunities for appropriate use and interpretation of heritage properties.

- Forest Plan Standard FW- 211: Consult with Heritage specialists in the planning stages of projects involving ground disturbance, diminished jurisdiction, or increased public use of, or access to, an area.
- Forest Plan Standard FW- 212: Responsible official will halt any project during ground disturbance activities if known or newly discovered heritage resources are encountered, regardless of whether the area has been previously disturbed, until the significance of the site has been determined by Forest heritage staff through coordination with consulting parties.
- Forest Plan Standard FW- 214: Pursuant to 36 CFR 196.18, site locations are exempt from provisions of the Freedom of Information Act. Do not disclose site locations in documents available to the public, including heritage GIS data, unless agreed to by all parties, including Native American tribes as appropriate.
- FLP Specific: All actions associated with the Foothills Landscape Project will follow the stipulations of the Foothills Programmatic Agreement.

☑ If relevant, use space below to list additional survey needs or pertinent information to include in the Implementation Plan:

Draft consultation report has been prepared and submitted to Tribes and SHPO for review the week of August 15. Proposal calls for survey of 365 acres of high probability area that will be affected by proposed activities and 261 acres of high probability areas within the IA but outside area of potential effect. Sacred Site review will be completed when botanical surveys are done in fall so that information can be included. Contract to complete archeological surveys on 626 acres has been awarded and fieldwork is scheduled to start September 2022. Once surveys have been completed in 2023 sites to protect will be identified and shared with IDT.

	\Box Maps and visual aids have been attached. Level of detail should be sufficient to allow for adequate planning and identification of issues and concerns.
Please	select one of the statements below:
	$oxed{\boxtimes}$ All activities shown in the draft plan have been reviewed for compliance with the Foothills Landscape EA or other relevant NEPA compliance and my resource. There are no changed conditions at the time of this review.
	OR
	☐ All activities shown in the draft plan have been reviewed for compliance with the Foothills Landscape EA or other relevant NEPA compliance and my resource. There are changed conditions or specific actions that are not in compliance. These conditions or actions are listed below.

Click or tap here to enter text.		

Signature

James Wettstaed Archaeologist

Fire and Fuels

- ☑ Identify the existing fire condition class (FCC) and opportunities/ needs for treatment (EA Appendix F: Table 45).
- ☑ Identify any existing hazardous fuels and opportunities for treatment in WUI based on risk (EA Appendix F: Table 44).
- ☑ Identify existing Rx burn unit(s) present in the IA.
- ☑ Identify if new burn units need to be established. Consider the implementation needs for that new burn unit. For example, but not limited to:
 - Are natural barriers present?
 - Is dozer line needed? If so, resource concerns?
 - Other?
- \boxtimes If relevant, use space below to list additional survey needs or pertinent information to include in the Implementation Plan:

The Mooneyham IA has a history of summertime natural fire ignitions. For example, in July of 2022, an 89-acre wildfire was started at the summit of Iron Mountain in the proposed Iron Mountain Rx burn block, presumably by lightning strike. These summertime wildfires show a resistance to control and can result in mortality of the overstory. Areas burned in summertime wildfires have resulted in new occurrence of fire adapted plant species such as Eastern turkeybeard. Areas outside of existing burn units would fall into FCC3.

Areas within existing burn units have a FCC of 2. These units have several occurrences of fire-dependent species. The burn units have each received 3+ Prescribed fire treatments within the past 10+/- years. The units still have substantial fuel loadings from mortality due to wildfires and prescribed burns.

Existing burn units in IA: Mooneyham and Turkeybeard

New burn units proposed: Mooneyham Extension, Iron Mountain (Georgia portion), and Halfway Branch (Georgia portion).

The Mooneyham burn unit is adjacent to the state line, forest boundary, and private lands with multiple structures occurring in the Wildland Urban Interface. Mooneyham Extension would require new dozer line to be constructed along the northwest boundary, western boundary, and southwest boundary.

The proposed Iron Mountain burn unit is adjacent to or within ¼ mile of multiple private residences and outbuildings and Forest Service recreation facilities such as Cottonwood Patch Campground and the Snorkel Hole on the Cherokee NF. It is bounded by the Conasauga River to the North, East, and Southeast. The planning of the Iron Mountain RX unit requires cooperation with the Cherokee National Forest as a portion of the unit extends north into Tennessee across the forest/state Boundary. This occurs because the northern boundary of the unit is the natural barrier of the Conasauga River. The Cherokee National Forest will complete NEPA for the portion of the Iron Mountain Prescribed fire unit extending into Tennessee.

The Cherokee National Forest is proposing a new burn unit (Halfway Branch) that extends south into Georgia (and the Foothills Landscape) due to utilization of the Conasauga River as its southern boundary. They will complete NEPA for the portion falling in Tennessee.

Terrain and access are limiting factors to all units within the planning area. Steep, rocky terrain with heavy fuels limit safe access and fire line construction for fire line personnel.

	\square Maps and visual aids have been attached. Level of detail should be sufficient to allow for adequate planning and identification of issues and concerns.
Please s	elect one of the statements below:
	☐ All activities shown in the draft plan have been reviewed for compliance with the Foothills Landscape EA or other relevant NEPA compliance and my resource. There are no changed conditions at the time of this review.
	OR
	☑ All activities shown in the draft plan have been reviewed for compliance with the Foothills Landscape EA or other relevant NEPA compliance and my resource. There are changed conditions or specific actions that are not in compliance. These conditions or actions are listed below.
	The northern portions of the Iron Mountain and Turkeybeard prescribed burns will require additional NEPA to be completed by the Cherokee National Forest, as it falls outside the Foothills landscape/Chattahoochee National Forest boundary.
	Signature Jeffery Schardt

Soils and Hydrology

- \boxtimes Check with Forest Soil Scientist/ Hydrologist to determine existing and projected Total Impervious Area (TIA) in each 6th level HUC (EA Table 48, Appendix F).
- FLP Specific Project Design Feature: Watershed TIA should not exceed 10%. Impervious surfaces are those that prohibit the movement of water from the land surface into the underlying soil (ex. Roads, trails, and other compacted areas).
- ☑ Identify current Watershed Condition Class and identify any Priority Watersheds (See Tables 6 and 7 in EA). If Priority Watersheds exist, work with Forest Soil Scientist and/or Hydrologist on Watershed Restoration Action Plan (WRAP).
- ☑ Identify Streamside Management Zones (SMZs), proper widths, and any prescriptions within the SMZ.
- ☑ Coordinate with Forest Soil Scientist to ensure past detrimental disturbance in combination with proposed treatment disturbance would not exceed 15% of the activity area. If 15% would be exceeded by the treatment, evaluate the area for soil restoration activities.

Fire Management Officer

	Coordinate with Forest Soil Scientist to identify any sensitive soil types (see various hazards and ratings in soil report) and slopes greater than 35%.
	☑ The project design must comply with the following project design features:
	Forest Plan Standard FW- 065: On all soils dedicated to maintaining forest cover, the organic layers, topsoil, and root mat will be left intact over at least 80% of an activity area.
	Forest Plan Standard FW- 06: Water control structures necessary for the control of surface water movement resulting from soil disturbing activities will be constructed within 30 days of completion of the activity.
	oxtimes If relevant, use space below to list additional survey needs or pertinent information to nclude in Implementation Plan:
	This Implementation Area consists of two watersheds: Bogden or Ballplay Creek and Perry Creek. According to the analysis conducted for the EA, if the maximum veg treatments were implemented within the Bogden/Ballplay watershed the total impervious area would only be 1.9%. For Perry Creek, the total impervious area would only be 1.5%. Note: It seems Bogden/Ballplay was left off the final version of Table 7 in the Hydro report, but it was evaluated and is included in previous versions.
	Both watersheds have been identified as Priority Watersheds and WRAPS have been completed and updated with essential projects accordingly.
	Bullet points 3-6 have been evaluated for current planning and will be revisited and refined throughout the planning process.
	☐ Maps and visual aids have been attached. Level of detail should be sufficient to allow for idequate planning and identifcation of issues and concerns.
Please se	elect one of the statements below:
L	All activities shown in the draft plan have been reviewed for compliance with the Foothills andscape EA or other relevant NEPA compliance and my resource. There are no changed conditions at the time of this review.
C	DR
La	All activities shown in the draft plan have been reviewed for compliance with the Foothills and scape EA or other relevant NEPA compliance and my resource. There are changed conditions a specific actions that are not in compliance. These conditions or actions are listed below.
	Click or tap here to enter text.

Signature Taylor Hughes Soil/Hydrology Specialist

Recreation and Transportation/ Road System

	Identify impacts to developed recreation, designated dispersed recreation, and trails from n-recreation actions.
\boxtimes	Identify road maintenance/ improvements needed to implement proposed activities
	Verify data in INFRA and correct any discrepancies.
	Identify any roads from the EA with ML changes identified for maintenance level reduction o commissioning.
	Identify opportunities to improve the condition of NFS roads. Coordinate with Silviculture, Is and Engineering.
	The project design must comply with the following project design features:
>	Forest Plan Standard FW- 129 : During active projects, all roads, ditches, and other improvements in the project area are kept free of logs, slash, and debris. Any road, ditch, or other improvement damaged by operations is promptly repaired.
fro	Identify the impacts to the recreation user (user experience, access, public health and safety) m both the recreation-specific actions and non-recreation actions and determine appropriate thods of notification and communication. For example, but not limited to:
	 Are there any potential road closures that may impact access to recreation sites? Seasonal or temporary closures? Prescribed burning or vegetation management that may cause closures? Smoke or equipment that may conflict with users? Other?
the	Identify Scenic Integrity Objectives (SIOs) and Recreation Opportunity Spectrums (ROS) for EIA and communicate with Silviculture, Soils and Engineering any concerns of not adhering to ese management directions.
>	Forest Plan Standard FW- 097: The Forest SIO Maps and Tables in each prescription govern all new projects, including special uses. Assigned SIOs are consistent with ROS management direction. Existing conditions may not currently meet the assigned SIO.
>	Forest Plan Standard FW- 114: Maintain consistency between adopted SIOs and ROS management direction (Standard FW-102, 2-29), including promptly rehabilitating firelines to appear natural in areas of High and Very High SIO.
	Wild and Scenic River designation exists in the implementation area

☐ Confirm presence of designated National Scenic, Historic or Recreation Trails. If present, coordinate appropriately.	
\boxtimes If relevant, use the space below to list additional survey needs or pertinent information to include in Implementation Plan (i.e., other Recreation actions (including Categorical Exclusion level actions) occurring in the IA, anticipated public notices/ closure order needs specify):	

The Iron Mountain Trail (FT 77) would be impacted infrequently by use of prescribed fire in the area and the use of the trail as a fire line. These impacts would be similar or less than recent wildfire impacts in the same area and would consist of temporary closures of the trail during prescribed fire activities, and limited clearing and widening of the trail where necessary to improve fire control lines.

Proposed commercial timber harvest in two units would also impact the Iron Mountain trail due to 1.5 miles of the trail being concurrent with Forest Service Road (FSR)1A. These impacts would be limited to the duration of timber sale operations and would include potential closure of the trail during active operations for visitor safety, and temporary impacts to the trail conditions from heavy equipment use and hauling activities. Timber sale activities would occur on weekdays only to minimize these impacts to trail users, and trail conditions would be left suitable safety-wise for the weekends.

Some benefit to the long-term sustainability of the trails may be gained by removal of infringing vegetation and blowdown during these road and fire line maintenance/improvement activities. Trail sections utilized as fire line and timber sale access will be rehabilitated to maintain proper trail drainage and barriers will be constructed as necessary to eliminate illegal motorized vehicle access to the trail.

There is an existing equestrian Outfitter and Guide permit that includes the Iron Mountain Trail. The O&G permit holder will be notified as much in advance as possible of impending trail closures associated with both prescribed fire and timber operations and be allowed to temporarily utilize alternate trails during the closure period(s). Timber harvest activities will not be occurring on weekends, so impacts to the O & G permit from sale operations are anticipated to be very limited. Trail closure orders for the Iron Mountain Trail will be issued and posted as needed during periods of prescribed burning or timber harvest.

Forest Service Road (FSR) 151 is a seasonally gated hunting access road. Proposed timber and/or vegetation management would potentially include maintenance/improvement of FSR 151 in conjunction with timber sale and prescribed burning activities, which may result in improved hunter access.

The Conasauga River is a "recommended" Wild and Scenic River and as such, all areas adjacent to this river are to be managed under MRx 2.B. Portions of the Turkeybeard, Iron Mountain, and Halfway Branch (proposed by Cherokee National Forest) prescribed burns, and a non-commercial treatment to favor Eastern Turkeybeard are proposed within management prescription area 2.B.1 adjacent to the Conasauga River. No changes to current recreation facilities or trails are proposed. All actions within this area will be consistent with MRx standards for this 2.B. area.

One area proposed for two-aged regeneration harvest has an assigned HIGH SIO due to proximity to Hwy 411. A landscape architect has been consulted as required by the R8 Scenery Treatment Guide. Decommissioning a portion of FSR 1 and downgrading to ML2 will have limited impact on the public as the access to this road is private and has been gated by the landowner for several years. All roads planned for use in the Mooneyham Implementation Area have been surveyed for needed/deferred maintenance; FSR 151, 1, 1A. All roads used for vegetation and/or timber management will be maintained and improved to GA BMPs and Forest Plan Standards. Currently the INFRA data for FSR 1 and 1A is incorrect. We are working with Forest Engineering staff to correct the information. The INFRA data for FSR 151 is correct. Proposal identifies two maintenance level (ML) reductions or decommissioning: FSR 1 (1.2 miles) for a ML reduction from ML 3 to ML2 – Administrative use only and 1.3 miles of FSR 1 for decommissioning. Planned management actions will have multiple opportunities for FSR improvement. All timber management will include road work according to GA BMPs and the Forest Plan Standards. The proposal includes replacing 5 culverts with AOPs to improve habitat and road drainage as well as 1.5 miles of daylighting on FSR 151. ☐ Maps and visual aids have been attached. Level of detail should be sufficient to allow for adequate planning and identification of issues and concerns. Please select one of the statements below: ☑ All activities shown in the draft plan have been reviewed for compliance with the Foothills Landscape EA or other relevant NEPA compliance and my resource. There are no changed conditions at the time of this review. OR

☐ All activities shown in the draft plan have been reviewed for compliance with the Foothills

conditions or specific actions that are not in compliance. These conditions or actions are listed

Landscape EA or other relevant NEPA compliance and my resource. There are changed

below.

Click or tap here to enter text.

Signature Karen Larsen Recreation Specialist

Vegetation

- ⊠ Review/ collect stand exam data in accordance with current policy (forest health, species composition, stand age, basal area, etc.).
- ☑ Determine existing acres of young forest habitat (0-10 years old) in the IA using aerial imagery, remote sensing data, and/or ground truthing.
- ☑Work through Foothills decision matrixes for stands being considered for silvicultural treatment.
- □ Confirm stands are not identified for proposed old growth or forest plan designated Table 17 in FA.
- ☑ Do hemlock treatments exist, and if so, are any in Inventoried Roadless Areas (IRAs)?
- ⊠ Review operational feasibility and access. This includes, but not limited to:
 - Management Prescriptions
 - Identify potential roads needed based on proposed action. Coordinate with Engineering on any needed improvements (culvert replacements, road widening, etc.)
 - Temporary road construction anticipated. Coordinate with Soils, Engineering, Timber Sale Administrator, and other applicable resource areas
 - Slopes
- ☑ Determine connected actions (prescribed fire, herbicides, etc.). See EA, Table 17 and Appendix B for full list.
- ☐ The project design must comply with the following project design features:
 - > FLP Specific: Forested areas greater than 1/2 mile from a road should be excluded from commercial timber harvest.

	include in Implementation Plan:
	Stand exam data collected 2017-2019.
	Two existing prescribed burns in the Mooneyham implementation area (IA) have created small pockets of existing early successional forest (ESF) greater than two acres in the project area. The age of these blocks was determined using the Landscape Change Monitoring System web tool to determine what year the canopy was disturbed and a general area for the disturbance. These areas were ground truthed and there is determined to be 46 acres of existing young forest habitat (0-10 years old) in the project area.
	No stands in the Mooneyham implementation area (IA) were proposed for small block old growth designation under the Foothills EA because both of the 6 th level HUC watersheds meet the 5% minimum as required by the Forest Plan.
	No hemlock treatment areas are proposed in this IA.
Please :	☐ Maps and visual aids have been attached. Level of detail should be sufficient to allow for adequate planning and identification of issues and concerns. select one of the statements below:
	☑ All activities shown in the draft plan have been reviewed for compliance with the Foothills Landscape EA or other relevant NEPA compliance and my resource. There are no changed conditions at the time of this review.
	OR
	☐ All activities shown in the draft plan have been reviewed for compliance with the Foothills Landscape EA or other relevant NEPA compliance and my resource. There are changed conditions or specific actions that are not in compliance. These conditions or actions are listed below.
	Click or tap here to enter text.

☑ If relevant, use space below to list additional survey needs or pertinent information to

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Silviculturist

Signature William Hunter

IDT Leader or District Ranger

☑ Communicate IA location to Forest Land Surveyor early so that Boundary Management policies are followed, and concerns are either addressed and/or mitigated.
☑ Verify that all resource specific maps or visual aids have been completed.
\boxtimes NEPA for any changed conditions or activities not covered in the Foothills Landscape EA or other existing analysis has been initiated. Please review each specialist section above to identify the specific conditions or actions not covered.
oxtimes Besides the resource specific PDFs listed above, the project design must also comply with the following project design features:
FLP Specific: All activities should be evaluated for their potential to affect NNIS. A risk assessment (Example in Appendix A of NNIS report) should be utilized prior to implementation of any activity to determine the risks and consequences of the action on NNIS, and the necessary mitigations included as part of the activity.
Forest Plan Standard FW- 031: As part of recurrent monitoring and any project inventories, include data collection on existing or potential threats such nonnative invasive species
Forest Plan Standard FW- 032: Nonnative invasive species shall be controlled with priority given to areas where they are causing adverse effects to federally listed species, or to individuals of other species needed to maintain their population viability on the national forest. Nonnative invasive species are not intentionally introduced near these species or individuals, nor will management actions facilitate their inadvertent introduction.
Forest Plan Standard FW- 056: When seeding disturbed soils, use only native or non-persistent non-native species per Region policy.
$\hfill\Box$ If relevant, use space below to list additional needs or pertinent information to include in Implementation Plan:
District has completed force account boundary line maintenance within ¼ mile of proposed Mooneyham commercial vegetation treatment actions.
All proposed actions within the Mooneyham IA were considered within the programmatic Foothills Landscape Project EA and DN.
NNIS treatments are covered under existing NEPA; however, a pesticide use proposal and NNIS risk assessment will be completed/updated for NNIS treatment needs within the IA.

Signature Jeff Gardner District Ranger

Step 3: Draft Implementation Plan and Initiate Surveys

Instructions: District IDTs review data from initial field visits, surveys and inventories. The IDT works together to consider all information captured in Steps 1-2 above, identifies applicable project design features and recommend management actions needed for IA to the local Line Officer. The resulting information will be presented as a draft implementation plan (see end of this document) used to communicate the project-specific proposals for each IA to stakeholders and identify locations of remaining survey work/ data needs.

The following checklist provides guidance in completing the implementation plan attached to this document. This plan provides the baseline information necessary to comply with the overarching law.

policy, and regulation while ensuring consistency with the final EA and DN. Each resource special responsible for ensuring the information presented in this implementation plan is accurate and complete.	ist is
oxtimes All activities within the IA are fully listed and described. Please provide sheets for each project summarize on the first page.	and
oxtimes Ensure all relevant resource maps are attched to Implementation Plan. Level of detail should b sufficient to allow for adequate planning and identification of issues and concerns.	e
\square Ensure PDFs for each resource area (Step 2) have been included in the Draft Implementation P	lan.
oxtimes Ensure that all activities (or specific conditions or activity components) that need additional an are clearly articulated in the Draft Implementation Plan.	alysis
oxtimes Determine any outstanding needs or missing data and add to the Implementation Plan.	
oxtimes Conduct site-specific inventories for botanical species based on forest risk assessment di	rection
□ Conduct site-specific inventories for NNIS species	
⊠ Conduct other biological inventories as needed	
$\hfill\Box$ Complete NNIS risk assessment to determine needed mitigations	
☐ Conduct site-specific inventories for cultural resources	
☐ Other	
Use space below to provide additional information such as process for obtaining or detailed description of outstanding needs:	l
Site-specific inventories for botanical species have been conducted	
Site specific cultural resource inventories will be conducted in the Fall of 2022	
NNIS risk assessments will be completed prior to project implementation	
	1

Step 4: Present Draft Implementation Plan to Stakeholders (Foothills Collaborative Group)

Forest intends to engage the Foothills Collaborative Group (FCG) early and often throughout the life of the project to identify issues, concerns, and desires of its members. The FCG is (will be) a diverse, self-governing body of representatives from various interest groups and organizations who wish to assist the Forest in successful implementation of the FLP in accordance with the Final Environmental Assessment and Decision Notice.

The FCG would have opportunity to provide feedback and make recommendations on draft implementation plans prior to public notice. Utilizing collaborative input in this way allows for robust stakeholder influence throughout the life of the project. Ideally, having the FCG influence and refine draft implementation plans prior to public release will result in less controversial, more socially acceptable projects and help the agency accomplish its objectives with greater efficiency.

Summary of Comments Received:

Click or tap here to enter text.	
Summary of how comments were in	ncorporated into Implementation Plan:
Click or tap here to enter text.	

Step 5: Public Notice and Opportunity for Input

Instructions: The Forest will hold an annual meeting (anticipated late summer/ early fall) to provide public assessment of the draft implementation plan(s), refined maps, and schedule. If planned activities are demonstrated to fall within the scope and scale of the final EA/DN, feedback received during the annual meeting will be considered by implementation teams and responsible official and used to further collaborative efforts and adjust implementation activities as appropriate. If subsequent analysis is needed due to new or changed conditions in the IA that were not accounted for in the programmatic EA/ DN, the Forest will also seek official comment in accordance with NEPA. Outyear plans may also be presented at this time with opportunity for public engagement, though in less detail.

Summary of Comments Received:	
Click or tap here to enter text.	

Summary of how comments were incorporated into Implementation Plan: Click or tap here to enter text.

Step 6: Conduct Field Trip(s)/Educational Outreach

Instructions: Hold a public field trip of Choose an item. IA. The Forest anticipates at least one field trip per year, depending on public interest. These field reviews will focus on pre-implementation priorities/concerns identified from Steps 2-4; however post-treatment and monitoring activities may be viewed on the same trip if desired and feasible. The FCG should help identify priorities or potential areas of concern, and subject matter experts for furthering education opportunities.

Summary of field to	ip details and	d comments received:
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Click or tap here to enter text.				
Summary of how comments were	e incorporated into	Implementation	ı Plan:	
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Step 7: Identify Additional Monitoring Needs

Instructions: Identify specific monitoring that may be needed. Those already listed in the Forest Plan are considered mandatory. Additional monitoring recommendations provided from the FCG will be considered. Any additional monitoring is at the discretion of the line officer.

Click or tap here to enter text.

Step 8: Finalize Implementation Plan

Instructions: The IDT will finalize the implementation plan. Update the draft plan created in Step 4 with information and revisions that resulted from public involvement and survey results. Ensure all aspects of this checklist have been completed, including signatures, before submitting for approval by the line officer (District Ranger). Ensure contracts, agreements, burn plans, or other implementation instruments are reflective of this framework. Ensure proprietary information is protected (cultural and T&E).

\square Update final project acres and miles in Implementation Plan
\square For each resource area, update final acres and ensure information is complete
\square Finalize Silviculture prescriptions and marking guides
☐ Finalize prescribed burn plans
☐ Confirm all relevant PDFs are included
\square Confirm all maps are attached
\square Any additional analysis, if required, is completed and documentation is attached

Step 9: Submit for District Ranger Approval

Instructions: Submit the completed implementation plan to the District Ranger for review and approval.

I have ensured my district and SO specialists followed this guide as intended, and the resulting implementation plan and selected design features have been designed accordingly and in compliance with the final DN for the FLP. Additional information, if relevant to this review, has been documented below:

Signature District Range 10: Conduct Contract Review (if applicable) The Timber Contracting Officer will review the contract package to ensure the applicable desig features included in final implementation plan are identified within various contract C provisions. Signature Contracting Officer		Click or tap here to enter text.
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	r	
	S	Signature

Foothills Landscape Project Implementation Plan

Implementation Area: Mooneyham

Ranger District: Conasauga

Date: August 10, 2022

Instructions: Use the tables and template(s) that follow to summarize all actions to be implemented within the IA; drafted during Step 3 and finalized during Step 8. The Plan Summary table should list all activities selected from the checklists below, with each activity described in detail in the section that follows. When completing all project information, ensure all information is sufficient and relevant to provide a full and detailed project description. The summary table below can be used to quickly track the number of projects within the IA and the acres or miles of disturbance impacts.

Activities Implementable from Final DN: Select all that apply. See Table 17 in the EA for full description of action and connected actions.

Selected for this Project	Activities That are Part of This Project	Primary Actions	Location (ie. HUC, Compartment Stand, and or Geographic Description)	Draft Acres and/or miles of road/trails, etc.	Final Acres and /or miles of road/trails, etc.
	Bog improvement actions including hydrologic restoration and removal of encroaching vegetation (may include commercial treatment)	Raise stream profiles by filling or plugging ditches Removing encroaching vegetation by commercial, non- commercial harvest	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.
	Canebrake restoration actions including overstory removal (may include commercial treatment)	Removing encroaching vegetation by commercial, non- commercial harvest	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.
	Small-whorled pogonia improvement actions including experimental canopy and midstory removal	Non-commercial thinning or hand clearing	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.

Selected for this Project	Activities That are Part of This Project	Primary Actions	Location (ie. HUC, Compartment Stand, and or Geographic Description)	Draft Acres and/or miles of road/trails, etc.	Final Acres and /or miles of road/trails, etc.
	Non-commercial release of hemlock trees to decrease susceptibility of hemlock to hemlock woody adelgid outside of HCAs	Individual tree release, non- commercial thinning	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.
	Designate small blocks of old growth	Allocate small blocks of old growth stands that are arranged in mosaics and connected by other habitat types	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.
	Stream habitat improvements	Add large woody debris to stream channels through cut and leave operations (mechanical and non-mechanical) Maintain and enhance existing instream structures	Comp 716 – Perry Creek Comp 714 – Bogden Creek, Gizzard Branch, unnamed tributary to the Conasauga River	2.3 miles	Click or tap here to enter text.
	Continuation of prescribed burning within existing burn blocks	Stabilize streambanks Prescribed burning during dormant and/or early growing season on a recurring basis	Mooneyham Rx Burn – Comp 715, 716; Turkeybeard Rx Burn – Comp 714	724 ac	Click or tap here to enter text.
	Decommissioning of maintenance level (ML) 2 and ML1 system roads	Close road/trail to public; may include full obliteration of roadbed, removal of stream crossing fills/ culverts with restoration of channel, crushing and burying inlets, seeding, fertilizing, mulching, drainage improvements, scattering slash, etc.	FSR 1 Doogan Mountain Rd from intersection of Iron Mountain Trail to end of road	1.3 mi	Click or tap here to enter text.
	Implement changes to system road ML and/or use restrictions	Reduce ML in system roads, including seasonal closure in some roads update MVUM	FSR 1 Doogan Mountain Rd from start at Old Hwy 2 to Iron Mountain Trail	1.2 mi	Click or tap here to enter text.
	Implement changes to system road ML and/or use restrictions	Increase ML, pave road, install safety features, improve drainage (NFSR 18, Holly Creek)	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.

Selected for this Project	Activities That are Part of This Project	Primary Actions	Location (ie. HUC, Compartment Stand, and or Geographic Description)	Draft Acres and/or miles of road/trails, etc.	Final Acres and /or miles of road/trails, etc.
existing are caus	Reconstruction of existing roads that	Widen curves	Click or tap here to	Click or	Click or
	are causing	Upgrade culverts	enter text.	tap here to	tap here to
	sedimentation to streams, particularly within watersheds with 305b and 303d listed streams	Harden or repair low-water stream crossings		enter text.	enter text.
		Upgrade or reconstruct drainage features, spot reconstruction if needed			
		Upgrade surface material and configuration using Georgia BMPs			
	Decommission a section of Tatum	Close trail to public;	Click or tap here to	Click or	Click or
	Lead motorized trail	may include full obliteration of	enter text.	tap here to	tap here to
	and Milma Creek OHV trails	roadbed, removal of stream crossing fills/ culverts with		enter text.	enter text.
		restoration of channel, crushing and burying inlets, seeding, fertilizing, mulching, drainage improvements, scattering slash, etc.			
	Convert the Tibbs All- Terrain vehicle (ATV) trail and a section of Milma Creek OHV trail back to a system road	Administratively convert a section of the trail back to a system road	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.
	Convert the Rocky	Administratively	Click or tap here to	Click or	Click or
	Flats OHV trail back to a system road	convert a section of the trail back to a system road	enter text.	tap here to enter text.	tap here to enter text.
	Decommission low-	Administrative	Click or tap here to	Click or	Click or
	use trails (Murray's Lake Trail and Peeples Lake Trail)	removal of trails from system	enter text.	tap here to enter text.	tap here to enter text.
	Decommission Boggs	Update maps	Click or tap here to	Click or	Click or
	Creek developed	Administratively decommission	enter text.	tap here to	tap here to
	campground	campground	Onto toat.	enter text.	enter text.
	Decommission Oakey Mountain developed campground	Close to public;	Click or tap here to	Click or	Click or
		remove all	enter text.	tap here to	tap here to
		infrastructure (may include full obliteration of infrastructure), hardened surfaces, seeding, fertilizing, mulching, drainage improvements, scattering slash, etc.		enter text.	enter text.

Commercial Activities (May only occur in MRx suitable for timber production per selected Alternative (Alt 3)): Select all that

apply. See Table 17 in the EA for full description of action and connected actions.

Selected for this Project	Activities That are Part of This Project	Primary Actions	Location (ie. HUC, Compartment Stand, and or Geographic Description)	Draft Acres and/or miles of road/trails, etc.	Final Acres and /or miles of road/trails, etc.
	Restoration of southern yellow pine forest on dry sites dominated by mid to late-successional Virginia or white pine	Two aged regeneration harvest	Comp 714 Stand 11; Comp 715 Stands 3, 13; Comp 716 Stand 25	128 acres	Click or tap here to enter text.
	Restoration of southern yellow pine forest or oak forest on sites currently occupied by off-site pine plantations (loblolly or white pine) or failed shortleaf or pitch pine plantations	Two-aged regeneration harvest	Comp 716 Stands 10, 22, 24	59 acres	Click or tap here to enter text.
	Maintenance of southern yellow pine forest	Commercial thinning	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.
	Maintenance of southern yellow pine forest	Expanding gap treatment	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.
	Maintenance of oak forest	Commercial thinning	Comp 716 Stands 3, 4	49 acres	Click or tap here to enter text.
	Maintenance of oak forest	Expanding gap treatment	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.
	Commercial and non-commercial thinning of pine plantations to improve forest health	Commercial thinning	Comp 712 Stand 20; Comp 715 Stands 17, 18; Comp 716 Stands 1, 13, 20	151 acres	Click or tap here to enter text.
	Create young forest (ESH) in mesic hardwoods	Two-aged regeneration harvest	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.

Selected for this Project	Activities That are Part of This Project	Primary Actions	Location (ie. HUC, Compartment Stand, and or Geographic Description)	Draft Acres and/or miles of road/trails, etc.	Final Acres and /or miles of road/trails, etc.
	Create young forest (ESH) by daylighting roads and permanent openings	Two-aged regeneration harvest	Comp 716, 50 ft corridor following FSR 151	8 acres	Click or tap here to enter text.
	Creating young oak forest (ESH)	Shelterwood or two-aged regeneration harvests	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.
	Restoring open woodland habitats on appropriate sites	Commercial or non- commercial thinning	Comp 714 Stands 14, 19, 42	66 acres	Click or tap here to enter text.
	Canopy gap creation in closed- canopied mesic stands	Commercial and non-commercial thinning		Click or tap here to enter text.	Click or tap here to enter text.
		Overstory and midstory reduction w/ variable tree density retention; gaps implemented would total <25% of stand acreage with gap size no more than 3/4-acre each.			
	Create or expand permanent openings	Remove trees Prepare site by grading and stump removal	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.
	Reduce hazardous fuels in the WUI	Mid-story reduction Commercial or non- commercial thinning	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.

Non-Commercial Action(s): Select all that apply. See Table 17 in the EA for full description of action and connected actions.

Selected for this Project	Activities That are Part of This Project	Primary Actions	Location (ie. HUC, Compartment Stand, and or Geographic Description)	Draft Acres and/or miles of road/trails, etc.	Final Acres and /or miles of road/trails, etc.
\boxtimes	Maintenance of oak forest	Mid-story reduction	Comp 714 Stands 4, 10, 13, 21; Comp 716 Stands 8, 9	181 acres	Click or tap here to enter text.
	Maintenance of oak forest	Crown-touching release with manual methods	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.
⊠	Commercial and non-commercial thinning of pine plantations to improve forest health	Non-commercial thinning	Comp 716 Stand 19	38 acres	Click or tap here to enter text.
	Replacement of culverts, fords, or bridges to increase aquatic organism passage and function	Replacement of culverts, fords, or bridges	Comp 716 – one on FSR 151, two south of forest boundary on private property; Comp 714 – two on FSR 1A	5 aquatic organism passages	Click or tap here to enter text.
	Prescribed fire in new burn blocks to facilitate restoration or maintenance of fire-adapted ecosystems or to reduce hazardous fuels	Prescribed burning during dormant and/or early growing season on a recurring basis	Halfway Branch Rx Burn – Comp 714; Iron Mountain Rx Burn – Comp 714, 712; Mooneyham Extension Rx Burn – Comp 716	958 acres	Click or tap here to enter text.
	Willis Knob Horse Trail Improvements	Construct new trail Re-route and construct/re- construct portions of trail on areas with resource concerns outside of the WSR, block or obliterate problem portions of trail Relocate parking area Construction of connector trails from parking to campground Campground improvements	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.

Selected for this Project	Activities That are Part of This Project	Primary Actions	Location (ie. HUC, Compartment Stand, and or Geographic Description)	Draft Acres and/or miles of road/trails, etc.	Final Acres and /or miles of road/trails, etc.
	Develop and maintain sustainable recreation within the WSR corridor – Earls Ford	Construction of new system trails Removal and restoration of degraded sites and designation of dispersed camping areas	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.
	Willis Knob Horse Trail Improvements within the WSR	Re-route and construct/re-construct portions of trail on areas with resource concerns, block or obliterate problem portions of trail	Click or tap here to enter text.	Click or tap here to enter text.	Click or tap here to enter text.

Action(s) or Conditions that Need Additional Analysis (Please Refer to Step 2 Resource Sections):

Specific Action or Condition Needing Analysis, if applicable	Analysi	is complete?
Proposed Iron Mountain Rx portion in TN – outside of Foothills landscape, being analyzed by the Cherokee NF in conjunction with their Halfway Branch prescribed burn.	□yes	⊠no
Click or tap here to enter text.	□yes	□no
Click or tap here to enter text.	□yes	□no
Click or tap here to enter text.	□yes	□no

Activity Name: Stream habitat improvements

Detailed Description:

<u>Existing Condition (Need)</u>: Recent surveys in several tributaries to the Conasauga River (in Tennessee) indicate that large wood and habitat complexity is severely lacking in the Conasauga watershed. Large woody debris (LWD) can slow flows and restore a more natural stream channel, while allowing passage for aquatic organisms. LWD additions can retain sediment locally, build point bars, and aggrade the stream channel, bringing it closer to the historic floodplain.

<u>Desired Condition:</u> Increase of LWD in streams (Forest Plan Goal 26). The Watershed Condition Framework defines the desired condition of a watershed as having large woody debris in the streams and appropriate stream geometry and bank stability. LWD additions should reflect local reference conditions or an estimated 12 pieces per 100 m (200 pieces per stream mile).

<u>Known Conditions that Trigger Restoration Actions:</u> Perennial and intermittent streams where lack of wood is impairing hydrologic and biologic processes; structure is lacking; or severe erosion occurring.

How to Implement Change: The addition of large woody debris to streams in several streams in the Mooneyham IA is proposed in order to increase structural complexity in streams where a lack of wood is impairing the hydrologic and biologic processes of the aquatic environment. This activity would be completed by hand felling trees (or utilizing storm or insect-killed trees on the ground) into or across the stream channel, using winches and tackle to move and position felled trees, and in some locations, a farm tractor would be used to move felled trees into position. This is proposed in sections of Perry Creek, Bogden Creek, Gizzard Branch, and an unnamed tributary to the Conasauga River.



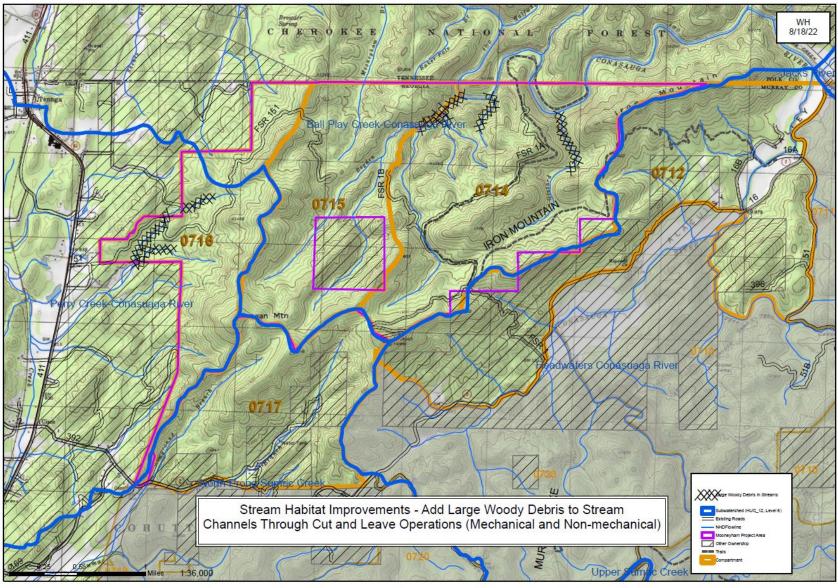
Watershed(s) (6th-level HUC) where activity is planned:

Perry Creek is in the Perry Creek – Conasauga River HUC - #031501010105. Bogden Creek, Gizzard Branch, and the unnamed tributary to the Conasauga River are in the Ballplay Creek – Conasauga River HUC - #031501010103. Both are Priority Watersheds.

MRx(s) where activity would occur: Perry Creek is in MRx 9.H. Management, Maintenance and Restoration of Plant Associations. Bogden, Gizzard, and the unnamed tributary to the Conasauga are in MRx 2.B.1 Recommended Wild River Segments and 7.E.2 Dispersed Recreation Areas with Vegetation Management.

Aquatic habitats benefit from large wood inputs provided by tree falls or debris positioned into place.

Resource Project Design Features: Do project activities follow all listed resource-specific PDFs in Step	2?
$oxed{oxed}$ Yes $oxed{oxed}$ No (If no, document if additional analysis per NEPA is triggered and if so, analysis is referenced and/or attached prior to finalization.)	
Additional Project Design Features: Add any additional Project Design Features necessary to avoid significant impacts. Use list at end of this plan in Attachment A to guide selection of all that apply. List PDF numbers.	







Activity Name: Continuation of prescribed burning within existing burn blocks

Detailed Description:

Existing Condition (Need): There are 2 burn units in the Mooneyham IA. Both have each received multiple prescribed fire treatments within the past 10+/- years, moving them from FCC 3 to FCC2. There is a need to maintain this trend. The units still have a variety of fuel loadings ranging from heavy to moderate due to wildfires, prescribed burns, vegetation management activities and the continued need to restore native vegetative conditions. Due to their location these burn units have served as buffer zones to prevent fires from burning onto or off private lands. This has been proven to be an effective strategy as evidenced during the drought and severe fire season of 2016. Continued burning of these units will enhance the reduction of hazardous fuels and aid in the restoration of native communities. These units have several occurrences of fire-dependent species.

<u>Desired Condition:</u> Expand the role of fire to recover and sustain healthy, fire-adapted ecosystems as much as possible, as a natural process (Forest Plan Goal 61).

<u>Known Conditions that Trigger Restoration Actions:</u> Where prescribed burning is required or preferred to meet restoration silvicultural objectives and can be accomplished safely within existing burn blocks.

<u>How to Implement Change:</u> Prescribed fire plans would be prepared describing weather and fuel conditions needed to meet the desired site-specific objectives, fire intensities and ignition methods, and a risk evaluation to safely execute the prescribed fire while considering the effects of the fire on other resources, including smoke impacts. Firelines would be rehabilitated as appropriate including installing water bars, revegetation, and blocking of the 'take offs' on roads to prevent illegal motor-vehicle use.

There are two existing prescribed burn blocks in the Mooneyham IA. Both have established control lines and have been previously burned on a 3-to-5-year rotation to restore fire after many decades in which all fire had been suppressed:

- Turkeybeard is a 435-acre block, 419 acres in Georgia, the remainder in Tennessee. The
 Cherokee NF plans to make a NEPA decision to cover the Tennessee portion of this burn block
 and future burn blocks which also cross the state line (Iron Mountain and Halfway Branch). It
 has been burned on a 3-to-5-year basis since 2007 to benefit the district's only known
 population of eastern turkeybeard (Xerophyllum asphodeloides).
- Mooneyham is a 305-acre burn block that has been burned 2-3 times since 2012. A small portion of the unit (ridgetop south of FSR 151, Mooneyham Road) was fire-killed as a result of the 2012 burn and consequently the area south of the road (approximately 95 acres) has not been re-burned since that time. The ridgetop vegetation is being monitored by district personnel and that section would not be burned again until the area is stable and completely revegetated. NOTE: the Mooneyham burn block is proposed for expansion to the west to facilitate other vegetation management proposals. See the information page and maps associated with Proposed New Prescribed Burning.

Watershed(s) (6th-level HUC) where activity is planned:

The western third of the Mooneyham burn is in the Perry Creek – Conasauga River HUC - #031501010105. The remainder of that block and all the Turkeybeard Rx burn is in the Ball Play – Conasauga River HUC #031501010103. Both are Priority Watersheds.

MRx(s) where activity would occur: The Mooneyham Rx burn block is in MRx 9.H Management, Maintenance and Restoration of Plant Associations. Turkeybeard Rx burn block is in MRx 7.E.2 Dispersed Recreation Areas with Vegetation Management and 2.B.1 Recommended Wild River Segments.

Resource Project Design Features: Do project activities follow all listed resource-specific PDFs in Step 2?

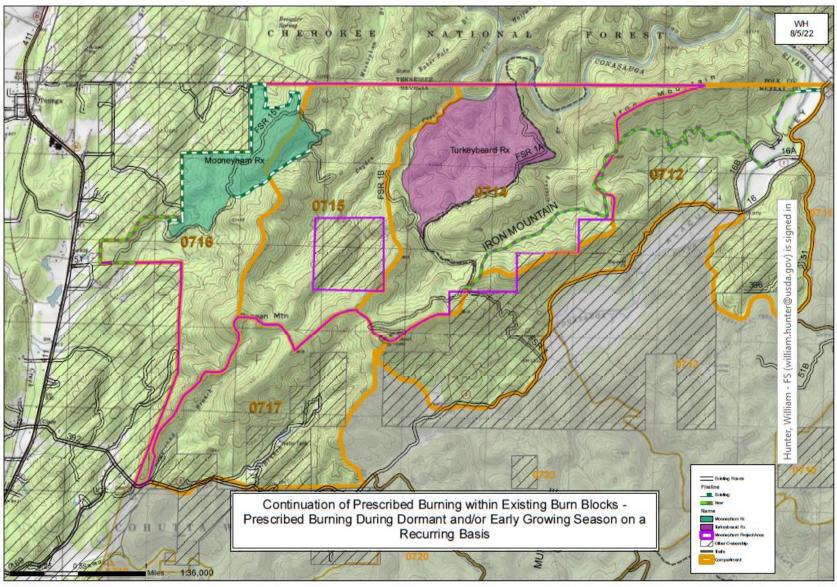
☑ **Yes** ☐ **No** (If no, document if additional analysis per NEPA is triggered and if so, analysis is



referenced and/or attached prior to finalization.)

Additional Project Design Features: Add any additional Project Design Features necessary to avoid significant impacts. Use list at end of this plan in Attachment A to guide selection of all that apply. List PDF numbers.

Forest Service firefighter Andy Baxter using a Pyroshot device during firing operations on the 2012 Turkeybeard prescribed burn.







Activity Name: Decommissioning of maintenance level (ML) 2 and ML1 system roads

Detailed Description:

Existing Condition (Need): Road density on Forest Service lands is moderate to high (0.8 - >1.6 miles/mile²) in over half of the landscape. The CONF currently does not receive enough funding or capacity to maintain these roads at their current management classifications. FSR 1 (Doogan Mountain) from MP 1.3 (at the National Forest boundary) to MP 2.6 (terminal end of the road at former fire tower site) is a maintenance level (ML) 2 road, closed year-round to the public and rarely used for administrative purposes.

<u>Desired Condition:</u> A transportation system which supplies the public, Forest Service, and other authorized users with safe, environmentally sustainable, equitable, financially sound, and operationally effective access to roaded portions of the project area. (LRMP Goal 47)

<u>Known Conditions that Trigger Restoration Actions:</u> Identified roads that are not necessary for management or sustainable to maintain in their current condition.

<u>Detailed Description:</u> FSR 1 (Doogan Mountain) from MP 1.3 (at the National Forest boundary) to MP 2.6 (terminal end of the road at former fire tower site) would be permanently closed to vehicular traffic. An earthen barrier would be constructed at the forest boundary. The roadbed would be re-shaped to drain water by utilizing heavy equipment to construct waterbars, fill ditches, and outslope the roadbed. Compacted soil would be loosened by scarifying the surface to the depth of up to 12 inches. Disturbed soils would be seeded with native or approved non-native seed. Slash would be scattered on the surface of the road.



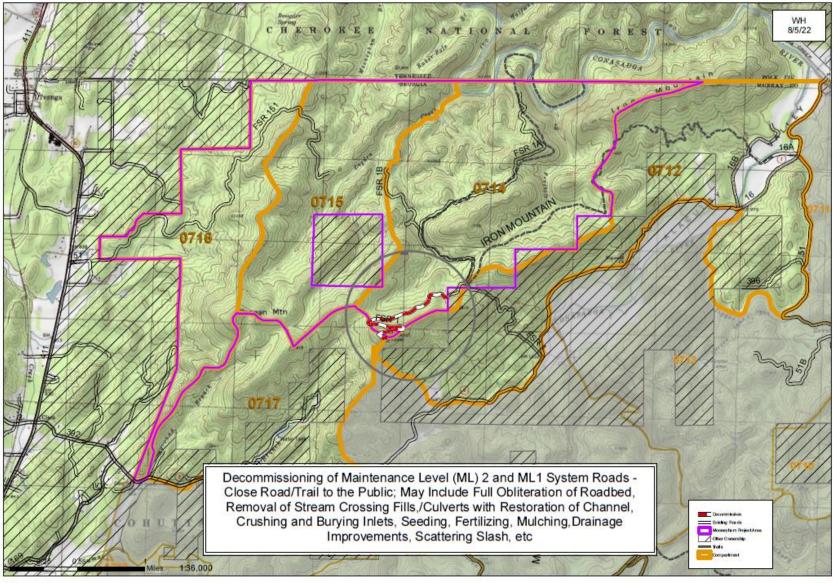
Watershed(s) (6th-level HUC) where activity is planned:

The section of FSR 1 planned for decommissioning is in the Ball Play Creek – Conasauga River HUC - #031501010103. It is a Priority Watershed.

MRx(s) where activity would occur:

The section of FSR 1 planned for decommissioning is in MRx 7.E.2 Dispersed Recreation Areas with Vegetation Management.

Resource Project Design Features: Do project activities follow a	II listed resoι	urce-specific PDFs in Step 23
The Forest Service does not receive enough funding or have enough capacity to maintain all roads at their current management classification. Specific roads have been identified to decommission (remove from the road system). referenced and/or attached prior to finalization.)		□ No (If no, document if inalysis per NEPA is nd if so, analysis is
Additional Project Design Features : Add any additional Project significant impacts. Use list at end of this plan in Attachment A t PDF numbers.	•	•







Activity Name: Implement changes to system road maintenance level (ML) and/or use restrictions

Detailed Description:

Existing Condition (Need): Road density on Forest Service lands is moderate to high (0.8 - >1.6 miles/mile²) in over half of the landscape. The CONF currently does not receive enough funding or capacity to maintain these roads at their current management classifications. FSR 1 (Doogan Mountain) from MP 0.0 (gate on private property at county road Old Highway 2) to MP 1.2 (National Forest boundary) is a ML 3 road, closed year-round to public access and is used 1-2 times per year for administrative purposes.

<u>Desired Condition:</u> A transportation system which supplies the public, Forest Service, and other authorized users with safe, environmentally sustainable, equitable, financially sound, and operationally effective access to roaded portions of the project area. (LRMP Goal 47).

<u>Known Conditions that Trigger Restoration Actions:</u> Identified roads that are not sustainable to maintain in their current condition or at their current ML.

<u>How to Implement Change:</u> The reduction of ML from ML 3 to ML 2 is to reflect current condition and the appropriate objective for maintenance.

Watershed(s) (6th-level HUC) where activity is planned:

The section of FSR 1 planned for reduction in ML is in the Ball Play Creek – Conasauga River HUC - #031501010103. It is a Priority Watershed.

MRx(s) where activity would occur: The section of FSR 1 planned for this reduction in ML is on private property.

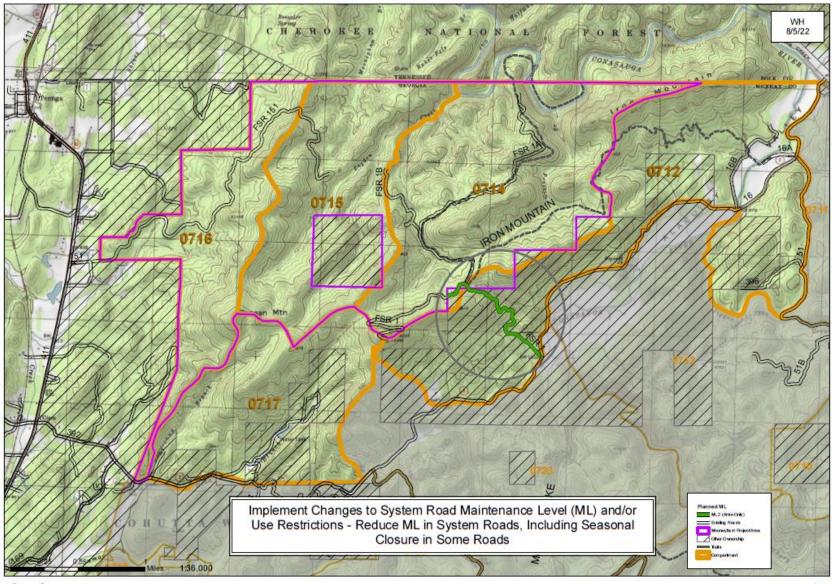
Resource Project Design Features: Do project activities follow all listed resource-specific PDFs in Step 2?

☑ **Yes** ☐ **No** (If no, document if additional analysis per NEPA is triggered and if so, analysis is referenced and/or attached prior to finalization.)

Additional Project Design Features: Add any additional Project Design Features necessary to avoid significant impacts. Use list at end of this plan in Attachment A to guide selection of all that apply. List PDF numbers.

The Forest Service does not receive enough funding or have enough capacity to maintain all roads at their current management classification. Specific roads have been identified for reduction in maintenance level (ML) to reflect current conditions.









Activity Name: Restoration of southern yellow pine forest on dry sites dominated by mid to late-successional Virginia or white pine – two-aged regeneration harvest

Detailed Description:

<u>Existing Condition (Need)</u>: Nearly a century of fire suppression has resulted in the establishment of more than 21,000 acres Virginia and/or white pine on dry sites ecologically suitable for fire-dependent shortleaf pine.

<u>Desired Condition:</u> Fire-dependent shortleaf pines are restored to ecologically appropriate sites and to sites where they once likely occurred (Forest Plan Objective 3.1). These treatments would also result in the creation of young forest habitats, which are generally lacking in the project area.

<u>Known Conditions that Trigger Restoration Actions:</u> Dry sites dominated by mid to late successional Virginia pine.

<u>How to Implement Change:</u> Restoration of shortleaf pine would be implemented using artificial regeneration methods. A two-aged regeneration harvest would be implemented to initiate the restoration process. Under this harvest method, the majority of the overstory trees in restoration areas would be removed. This would create large, continuous openings for restoration planting for regeneration. A portion of the trees (minimum of 15 ft2 per acre) in restoration areas would be reserved from cutting to form the two-aged condition. These trees would be retained in a non-uniform and



Comp 715 Stand 13 - 55-year-old Virginia pine stand proposed for restoration of shortleaf pine

variable distribution and would remain on-site indefinitely. Long-lived species such as shortleaf pine, white oak, chestnut oak, or hickory would be selected as reserve trees to be retained. Virginia and white pines, and other less desirable hardwood species would be harvested from the sites.

Following the harvest, restoration areas would be prepared for planting by (1) directed herbicide methods (cut-stump and foliar) to selectively treat non-desirable species persisting on the sites, and (2) a growing season site preparation prescribed burn. Once sites are prepared, restoration areas would be planted with shortleaf pine seedlings on a wide spacing (8 x 8, 10 x 10, or 12 x 12 foot spacing). One to three years following planting, planted seedlings would be released from woody competition (individual tree) using hand tools, mechanical mastication, or a directed herbicide application (directed foliar, cut surface, or basal bark methods) depending on the species and degree of competition. Once the canopy of the restoration areas approach crown closure (approximately 7 – 10 years post planting), a thinning using manual hand tools (chainsaws or brush cutters), or mechanical

mastication would be applied to reduce competition and maintain desired tree species composition. (For more information about connected herbicide actions, see Table 41 in the 2021 Foothills Landscape Project Environmental Assessment, page B45. For more information about site prep burns, see Site Preparation and Maintenance, page B45.)

Stands Proposed for Treatment:

Comp 714 Stand 11 - 29 ac Virginia pine stand, 45 years old Comp 715 Stand 3 - 26 ac Virginia pine stand, 55 years old Comp 715 Stand 13 - 31 ac Virginia pine stand, 55 years old Comp 716 Stand 25 - 42 ac Virginia pine stand, 57 years old



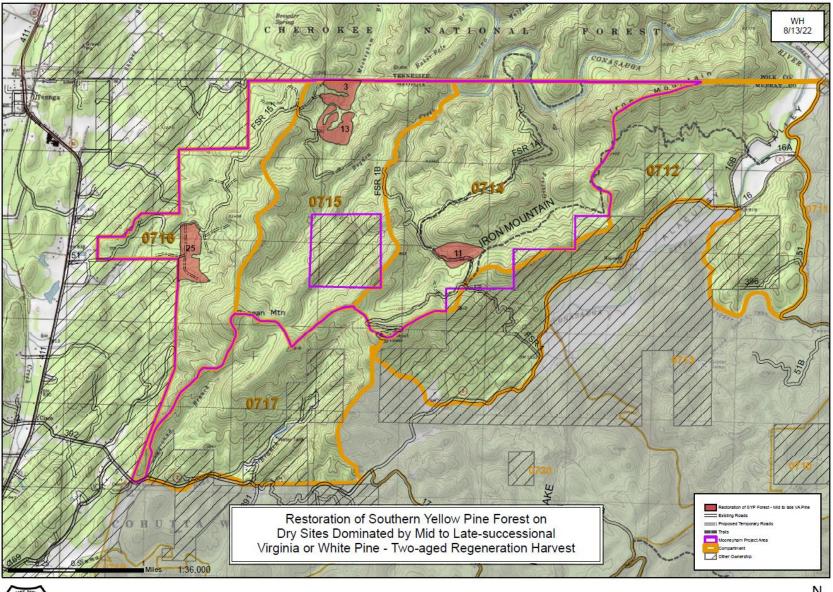
Comp 715 Stand 13 - 55-year-old Virginia pine stand proposed for restoration of shortleaf pine

Proposed temporary roads to access all proposed commercial timber treatments total 3 miles. Use of legacy road prisms would be favored over new temporary road construction when available. (For more information about temporary roads, see Connected Road and Log Landing Related Actions, 2021 Foothills Landscape Project Environmental Assessment, page B42)

Watershed(s) (6th-level HUC) where activity is planned:

These stands are in the Perry Creek-Conasauga River HUC - #031501010105 and the Ball Play Creek — Conasauga River HUC - #031501010103. Both are Priority Watersheds.

MRx(s) where activity would occur: 9.H Management, Maintenance and Restoration of Plant Associations and 7.E.2 Dispersed Recreation Areas with Vegetation Management
Resource Project Design Features: Do project activities follow all listed resource-specific PDFs in Step 2?
$oxed{oxed}$ Yes $oxed{oxed}$ No (If no, document if additional analysis per NEPA is triggered and if so, analysis is referenced and/or attached prior to finalization.)
Additional Project Design Features : Add any additional Project Design Features necessary to avoid significant impacts. Use list at end of this plan in Attachment A to guide selection of all that apply. List PDF numbers.
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Activity Name: Restoration of southern yellow pine forest or oak forest on sites currently occupied by off-site pine plantations or failed shortleaf or pitch pine plantations – two-aged regeneration harvest

Detailed Description:

<u>Existing Condition (Need)</u>: Previous management in the Foothills Project area resulted in establishment of over 11,000 acres of off-site pine plantations of pole-sized white pine or loblolly where regeneration to suitable southern yellow pine is desired.

<u>Desired Condition:</u> Fire-dependent southern yellow pines (shortleaf, pitch, table mountain pines) are restored to ecologically appropriate sites and to sites where they once likely occurred (Forest Plan Objective 3.1 and 3.2, OBJ-9.F-03).

<u>Known Conditions that Trigger Restoration Actions:</u> Off-site pine plantations of pole-sized white pine or loblolly where regeneration to suitable southern yellow pine is desired.

<u>How to Implement Change:</u> Restore off-site loblolly pine or white pine plantations to site-appropriate species through removal of the off-site planted species. Actions would be similar to that described in the *Restoration of southern yellow pine forest on dry sites dominated by mid to late-successional Virginia or white pine* section above (pages 46-47), including connected actions.

Stands Proposed for Treatment:



Comp 716 Stand 10-33 ac loblolly pine stand, 34 years old Comp 716 Stand 22-16 ac loblolly pine stand, 84 years old Comp 716 Stand 24-11 ac loblolly pine stand, 34 years old

716/10 falls in the Mooneyham burn. 716/22 falls in the Mooneyham Extension burn.

Proposed temporary roads to access all proposed commercial timber treatments total 3 miles. Use of legacy road prisms would be favored over new temporary road construction when available. (For more information about temporary roads, see Connected Road and Log Landing Related Actions, 2021 Foothills Landscape Project Environmental Assessment, page B42)

Comp 716 Stand 10, loblolly pine stand proposed for shortleaf pine restoration treatment

Watershed(s) (6th-level HUC) where activity is planned:

These stands are in the Perry Creek-Conasauga River HUC - #031501010105 and the Ball Play Creek — Conasauga River HUC - #031501010103. Both are Priority Watersheds.

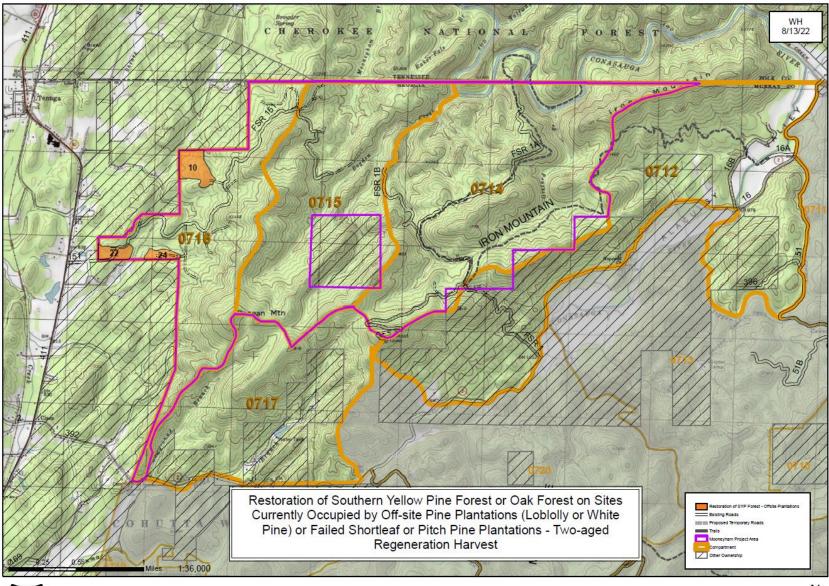
MRx(s) where activity would occur: 9.H Management, Maintenance and Restoration of Plant Associations

Resource Project Design Features: Do project activities follow all listed resource-specific PDFs in Step 2?

☑ **Yes** ☐ **No** (If no, document if additional analysis per NEPA is triggered and if so, analysis is referenced and/or attached prior to finalization.)

Additional Project Design Features: Add any additional Project Design Features necessary to avoid significant impacts. Use list at end of this plan in Attachment A to guide selection of all that apply. List PDF numbers.

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Activity Name: Maintenance of oak forest - commercial thinning

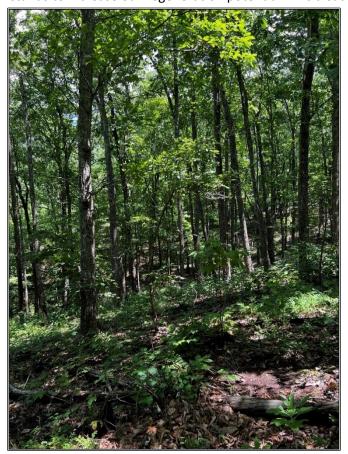
Detailed Description:

<u>Existing Condition (Need)</u>: Oak dominated forest types exist on more than 55,000 acres within the Foothills Project area. Over 90% of the oak forest is in late successional stage habitats. A general lack of disturbances in the oak forest community, including fire, has promoted the development of shade-tolerant, fire-sensitive species which are suppressing oak regeneration processes. This problem is most acute on the more productive oak sites but is evident in oak stands growing on lower productivity sites in many locations as well.

<u>Desired Condition:</u> Conditions within oak stands allow for and perpetuate natural oak regeneration processes to resume so that oak maintain dominance in the future (Forest Plan Objective 3.7)

<u>Known Conditions that Trigger Restoration Actions:</u> Mid to late successional oak exists on low to moderate productivity sites,

<u>How to Implement Change:</u> On lower to moderate productivity oak sites, commercial thinning in combination with midstory reduction treatments would be implemented on mid-late successional oak stands to increase oak regeneration potential. This treatment option would be implemented where



Comp 716 Stand 4, proposed commercial thin to maintain oak

conditions indicate that current oak regeneration potential is low (i.e., oak seedlings are small, infrequent, and/or are being outcompeted by shade-tolerant competitors in the understory). In areas selected for intermediate thinning, the thinning would reduce overstory trees to 40 – 60 ft2/ac, favoring oaks, hickories, or shortleaf pine. Following the commercial thinning, the areas would be evaluated for subsequent needs for midstory reduction treatments designed to reduce oak seedling competitors.

Treatment of the midstory/understory would be employed using a combination of direct herbicide treatments and/or prescribed burning. If unwanted vegetation persists on the sites after the thinning, then initial understory treatments would likely include herbicide applications to control this competition. Herbicide treatments could include directed foliar, cut stem or basal bark/streamline methods. The composition, size, origin, and density of understory competitors would dictate the herbicide method selected. Once herbicide treatments have been applied, prescribed burning treatments, where feasible, would be used to further reduce competition and to maintain the desired understory

environment. Initial prescribed burning would be conducted during the dormant season. Subsequent burn treatments would be applied during the growing season until the desired conditions have been achieved (development of oak reproduction). Periodic burn treatments would be applied using a combination of dormant and growing season treatments and frequency would be altered to allow oak seedling to gain height and prepare for canopy recruitment.

Stands Proposed for Treatment:

Comp 716 Stand 3 - 18 ac white oak-black oak-yellow pine stand, 104 years old Comp 716 Stand 4 - 31 ac chestnut oak-scarlet oak-yellow pine stand, 109 years old

These stands would be commercially thinned and then re-evaluated for follow up midstory treatment needs to encourage the development of advanced oak regeneration. Both stands fall in the Mooneyham prescribed burn.

Proposed temporary roads to access all proposed commercial timber treatments total 3 miles. Use of legacy road prisms would be favored over new temporary road construction when available. (For more information about temporary roads, see Connected Road and Log Landing Related Actions, 2021 Foothills Landscape Project Environmental Assessment, page B42)

Watershed(s) (6th-level HUC) where activity is planned:

These stands fall in the Ball Play Creek – Conasauga River HUC - #031501010103 watershed. It is designated a priority watershed.

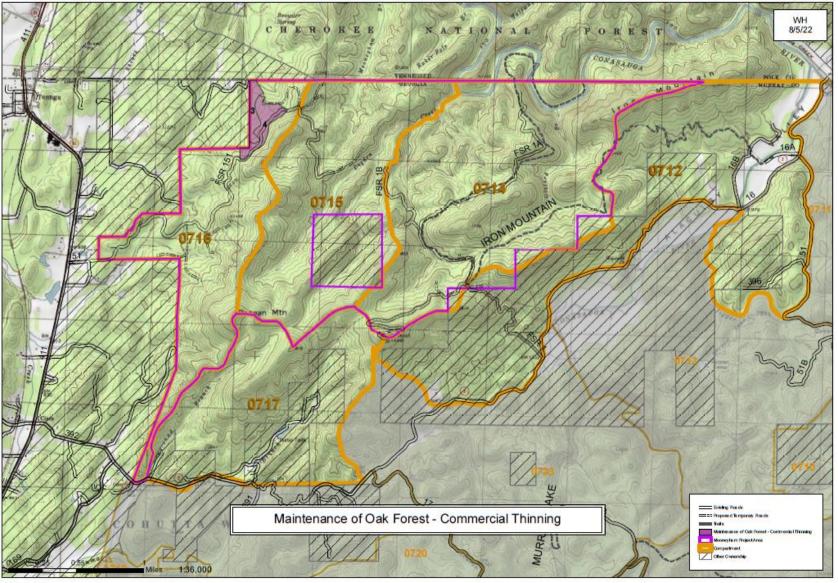
MRx(s) where activity would occur: 9.H Management, Maintenance and Restoration of Plant Associations

Resource Project Design Features: Do project activities follow all listed resource-specific PDFs in Step 2?

☑ **Yes** ☐ **No** (If no, document if additional analysis per NEPA is triggered and if so, analysis is referenced and/or attached prior to finalization.)

Additional Project Design Features: Add any additional Project Design Features necessary to avoid significant impacts. Use list at end of this plan in Attachment A to guide selection of all that apply. List PDF numbers.

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Activity Name: Commercial and non-commercial thinning of pine plantations to improve forest health – commercial thinning

Detailed Description:

<u>Existing Condition (Need)</u>: Within the Foothills Project area, there are nearly 25,000 acres of immature pine plantations highly vulnerable to pine bark beetle infestations due to overstocked stand conditions (Basal Areas > 120 ft2/acre).

<u>Desired Condition:</u> Stocking/density in pine plantations are reduced to levels that make them more resilient to pine bark beetle infestations (Forest Plan Objective 40.1)

Known Conditions that Trigger Restoration Actions: Young, overstocked, even-aged pine stands susceptible to forest pest outbreaks (i.e., ips, bark beetle). WUI (within ¼ mile of USFS boundary at High or Moderate Risk level) would be prioritized when applicable.

How to Implement Change: The project would improve forest health in overstocked pine stands, and would focus on young, overstocked, evenaged pine stands that were established during the last half-century. These pine plantations are proposed for commercial thinning to reduce the risk for bark beetle infestations. Thinning would reduce the basal area to less than 80 ft2/ac. Using prescribed fire (previously discussed) in coordination with thinning treatments would be applied in these areas to best meet restoration objectives.

Stands Proposed for Treatment:

Comp 712 Stand 20 – 28 ac Virginia pine stand, 42 years old

Comp 715 Stand 17 – 23 ac Virginia pine stand, 34 years old

Comp 715 Stand 18 – 33 ac Virginia pine stand, 33 vears old

Comp 716 Stand 1 - 26 ac loblolly pine stand, 32 years old

Comp 716 Stand 13 – 27 ac Virginia pine stand, 32 years old

Comp 716 Stand 20 – 14 ac loblolly pine stand, 32 years old



Comp 716 Stand 20, a 34-year-old loblolly stand proposed for commercial thinning to improve forest health

716/20 is a former loblolly pine progeny test. All of the Virginia pine stands are failed shortleaf stands that have been out-competed by Virginia pine due to lack of prescribed fire and the unavailability of

high-quality containerized shortleaf pine planting stock at the time of planting. Shortleaf that remains a component of these stand will be favored when choosing trees to retain.

712/20 is a Virginia pine stand. Vegetation surveys completed in 2022 have identified a population of small spreading pogonia - *Cleistes bifaria* (synonym *Cleistesbiopsis bifaria*), a Regional Forester's sensitive species (RFSS). This stand falls outside the boundary of the proposed Iron Mountain prescribed burn. *Cleistes bifaria* is a fire-adapted species that inhabits mountain habitats with dry, acidic soil. It benefits from disturbance that creates and maintains open canopy stand conditions. When the vegetation survey is complete and information about location and quantity of *Cleistes bifaria* in the stand is available, a plan to protect the plant will be developed that will include either buffering known plant locations or adjusting stand boundaries to exclude those areas.

Proposed temporary roads to access all proposed commercial timber treatments total 3 miles. Use of legacy road prisms would be favored over new temporary road construction when available. (For more information about temporary roads, see Connected Road and Log Landing Related Actions, 2021 Foothills Landscape Project Environmental Assessment, page B42)

Watershed(s) (6th-level HUC) where activity is planned:

These stands are in the Perry Creek-Conasauga River HUC - #031501010105 and the Ball Play Creek — Conasauga River HUC - #031501010103. Both are Priority Watersheds.

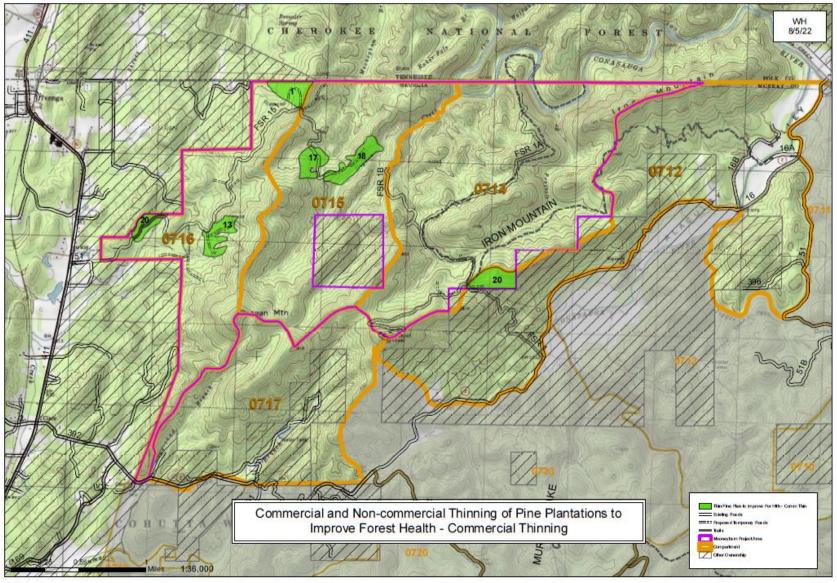
MRx(s) where activity would occur: 9.H Management, Maintenance and Restoration of Plant Associations and 7.E.2 Dispersed Recreation Areas with Vegetation Management

Resource Project Design Features: Do project activities follow all listed resource-specific PDFs in Step 2?

✓ **Yes** □ **No** (If no, document if additional analysis per NEPA is triggered and if so, analysis is referenced and/or attached prior to finalization.)

Additional Project Design Features: Add any additional Project Design Features necessary to avoid significant impacts. Use list at end of this plan in Attachment A to guide selection of all that apply. List PDF numbers.

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Activity Name: Create young forest by daylighting roads and permanent openings

Detailed Description:

<u>Existing Condition (Need)</u>: Mid-late successional forest dominates the Foothills Landscape (99%) while valuable young forest habitat which is a benefit to wildlife is extremely limited (less than 1%).

<u>Desired Condition:</u> Improved successional stage diversity and distribution of young forest habitats across the landscape on a variety of slopes, elevations, aspects, and forest types. A diversity of habitat will be provided for the full range of native and other desired species (Forest Plan Goal 2).

<u>Known Conditions that Trigger Restoration Actions:</u> This type of treatment would occur in areas, such as the boundaries of permanent openings (wildlife openings, utility corridors, and selected road segments), where opportunities for other young forest treatments are limited, but where the slopes are gentle enough to complete the work.

<u>How to Implement Change:</u> There is an opportunity to create young forest and improve habitat for wildlife by "daylighting" a road in the project area. Daylighting is the practice of removing the overstory tree canopy within a certain distance from a road or other permanent opening to create young forest and improve road conditions by allowing sunlight to reach the road surface. This type of habitat benefits pollinators as well as many songbirds and other wildlife.

This project would include commercial timber harvest of trees within an average of 25-feet of FSR 151, in segments where the commercial operation is feasible. A follow-up treatment to slash down non-commercial stems would be completed if needed. Approximately 1.5 miles (8 acres) of FSR 151 would be treated. Maintenance of the daylighted roadsides would occur as funding and workforce capacity permits.

Map(s) Attached Watershed(s) (6th-level HUC) where activity is planned:

The section of FSR 151 suitable for daylighting is in the Perry Creek – Conasauga River HUC - #031501010105. It is a Priority Watershed.

MRx(s) where activity would occur: This project location is in MRx 9.H Management, Maintenance and Restoration of Plant Associations.

Resource Project Design Features: Do project activities follow all listed resource-specific PDFs in Step 2?

✓ **Yes** ☐ **No** (If no, document if additional analysis per NEPA is triggered and if so, analysis is referenced and/or attached prior to finalization.)

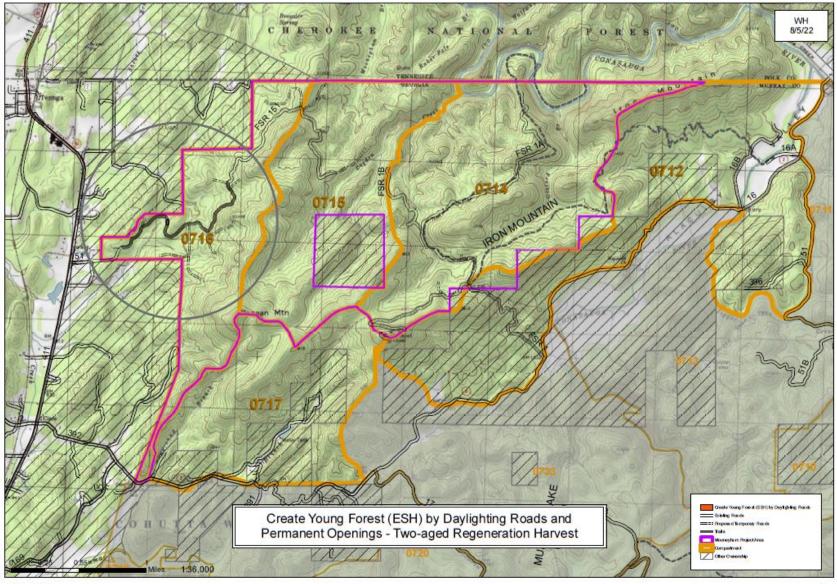


Daylighted roads benefit wildlife by creating young forest habitat and improve road conditions by allowing sunlight to reach the road surface.

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Additional Project Design Features: Add any additional Project Design Features necessary to avoid significant impacts. Use list at end of this plan in Attachment A to guide selection of all that apply. List PDF numbers.

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Activity Name: Restoring open woodland habitats on appropriate sites

Detailed Description:

Existing Condition (Need): Woodlands provide habitat for fire-adapted rare plants such as eastern turkeybeard (*Xerophyllum asphodeloides*). Prescribed fire has been applied to an area containing the largest of the turkeybeard populations in Mooneyham IA on a 3–5-year basis since the mid 2000's. Although essential for maintenance of the species, repeated prescribed fire has killed a large component of the fire-intolerant Virginia pine overstory. The open canopy has benefited eastern turkeybeard and other woodland associates but has also resulted in the sprouting of multi-stemmed red maple and other hardwoods which are encroaching on the rare plants.

A second population of eastern turkeybeard is within a closed canopy pine stand. The plants are of low vigor, not flowering, and in deep duff. They are outside of an existing burn unit but within the proposed Iron Mountain burn unit.

<u>Desired Condition</u>: A thin canopy with 20 – 60% canopy cover consisting of fire dependent hardwoods and yellow pine with a well-developed and diverse herbaceous ground cover. (Forest Plan Objective 3.4)

<u>Known Conditions that Trigger Restoration Actions:</u> Where woodland species persist (long-lived canopy trees serve as indicators for relic woodland) and combined with desired aspect, elevation, and ability to use prescribed fire.

<u>How to Implement Change:</u> The stands containing eastern turkeybeard are proposed for the following:

- A mid-story treatment of undesirable stems with a streamline/basal bark application of triclopyr ester (20% fraction in vegetable oil) during the dormant season. The turkeybeard plants themselves would be protected by a 10-foot buffer.
- Within the buffered area, a cut-surface treatment of triclopyr amine (50% fraction in water) would be applied to the cut surface of stems directly encroaching on the turkeybeard plants. The cut portions of the trees and shrubs and any other debris (limbs, pinecones) would be removed from the areas within the buffer to prevent fuel buildup. The duff layer would be raked and removed from the buffer area as well.

This treatment would be monitored by Forest Service personnel during implementation and for effectiveness in the subsequent 1-3 years.

Watershed(s) (6th-level HUC) where activity is planned:

The woodland site is in the Ball Play Creek – Conasauga River HUC - #031501010103. It is a Priority Watershed.



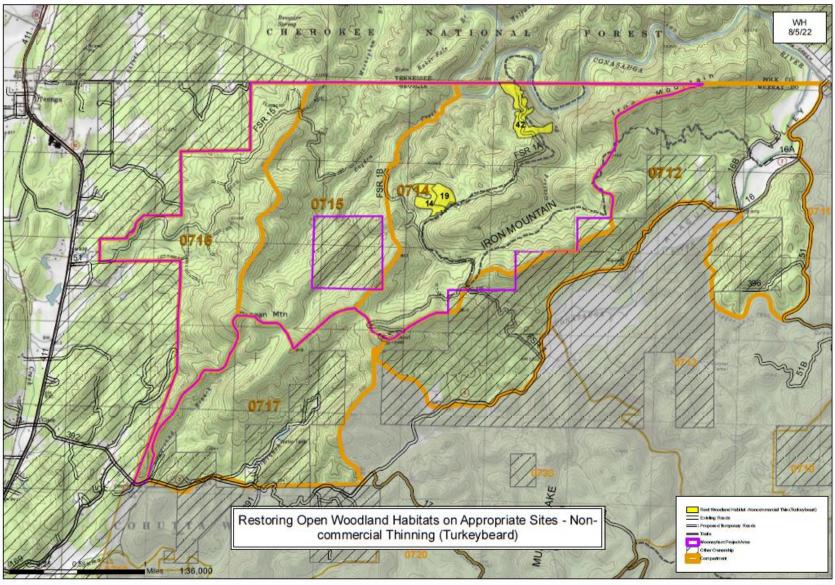
MRx(s) where activity would occur: Two of the stands to be treated are in MRx 7.E.2 Dispersed Recreation Areas with Vegetation Management. The other stand is in MRx 2.B.1 Recommended Wild River Segments.

Resource Project Design Features: Do project activities follow all listed resource-specific PDFs in Step 2?

✓ **Yes** □ **No** (If no, document if additional analysis per NEPA is triggered and if so, analysis is referenced and/or attached prior to finalization.)

Additional Project Design Features: Add any additional Project Design Features necessary to avoid significant impacts. Use list at end of this plan in Attachment A to guide selection of all that apply. List PDF numbers.

Eastern turkeybeard plant flowering 4 months after a prescribed burn.







Activity Name: Maintenance of oak forest – midstory reduction

Detailed Description:

Existing Condition (Need): Oak dominated forest types exist on more than 55,000 acres within the Foothills Project area. Over 90% of the oak forest is in late successional stage habitats. There are 0 acres of young oak (less than 10 yrs. within the landscape). A general lack of disturbances in the oak forest community, including fire, has promoted the development of shade-tolerant, fire-sensitive species which are suppressing oak regeneration processes. This problem is most acute on the more productive oak sites but is evident in oaks stands growing on lower productivity sites in many locations as well.

<u>Desired Condition:</u> Conditions within oak stands allow for and perpetuate natural oak regeneration processes to resume so that oak maintain dominance in the future (Forest Plan Objective 3.7)

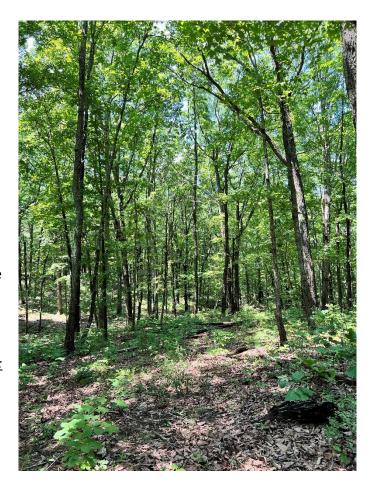
<u>Known Conditions that Trigger Restoration Actions:</u> There are two conditions that would trigger restoration actions:

- Where mid to late successional oak exists on low to moderate productivity sites
- Where mid to late successional oak exists on moderate to high productivity sites

How to Implement Change: To increase/restore oak regeneration potential within existing oak stands, several treatment options are proposed (see below). These treatments are designed to alter the light environment on the forest floor to stimulate growth of oak seedlings while controlling oak competitors in the understory. Treatments would result in development of larger and include more competitive oak seedlings, increasing the regeneration potential in existing mature oak stands. Stands with higher regeneration potential can maintain species dominance because adequate/competitive seedlings are available to replace parent overstory trees.

Increasing Oak Regeneration Potential with Midstory Reduction on Moderate to High Site Productivity, Mid-Late Successional Oak Sites:

On moderate to highly productive oak sites within the landscape, midstory reduction treatments would be implemented on existing mature oak stands to increase oak regeneration potential and meet maintenance objectives. These treatments would be carried out by mechanical mastication and/or targeted herbicide treatments applied to trees below the main



Comp 716 Stand 8 Proposed for oak midstory treatment to culture advanced oak regeneration

canopy. Herbicide application methods would include directed tree injection and/or basal bark treatments. Oak and hickory species would not be treated with herbicides or during mastication treatments. Treatments would be tailored to the site based on site productivity, with the level or intensity of the midstory reduction decreasing as site productivity increases. This treatment would enhance the light environment in the understory, allowing small oak seedlings to slowly develop into more competitive size classes. Because the treatment is applied to trees below the main canopy, large gaps in canopy are not created, preventing the rapid establishment of shade-intolerant species like yellow poplar from invading and dominating the understory.

Stands Proposed for Treatment:

Comp 714 Stand 4-36 ac white oak, northern red oak, hickory stand, 136 years old – site index 77 Comp 714 Stand 10-34 ac white oak, northern red oak, hickory stand, 136 years old – site index 71 Comp 716 Stand 9-15 ac white oak, northern red oak, hickory stand, 109 years old – site index 71

Proposed treatment includes herbicide application to midstory vegetation ≤ 8 " DBH. Roads and existing/proposed fire line locations will be buffered so as not to be affected by this treatment.

<u>Increasing Oak Regeneration Potential with Intermediate Thinning and Midstory Reduction on Moderate</u> to Lower Productivity Mid-Late Successional Oak Sites

Treatment of the midstory/understory would be employed using a combination of direct herbicide treatments and/or prescribed burning. Initial understory treatments would likely include herbicide applications to control this competition. Herbicide treatments could include directed foliar, cut stem or basal bark/streamline methods. The composition, size, origin, and density of understory competitors would dictate the herbicide method selected. Once herbicide treatments have been applied, prescribed burning treatments, where feasible, would be used to further reduce competition and to maintain the desired understory environment. Initial prescribed burning would be conducted during the dormant season. Subsequent burn treatments would be applied during the growing season until the desired conditions have been achieved (development of oak reproduction). Periodic burns would be applied using a combination of dormant and growing season treatments and frequency would be altered to allow oak seedling to gain height and prepare for canopy recruitment.

Stands Proposed for Treatment:

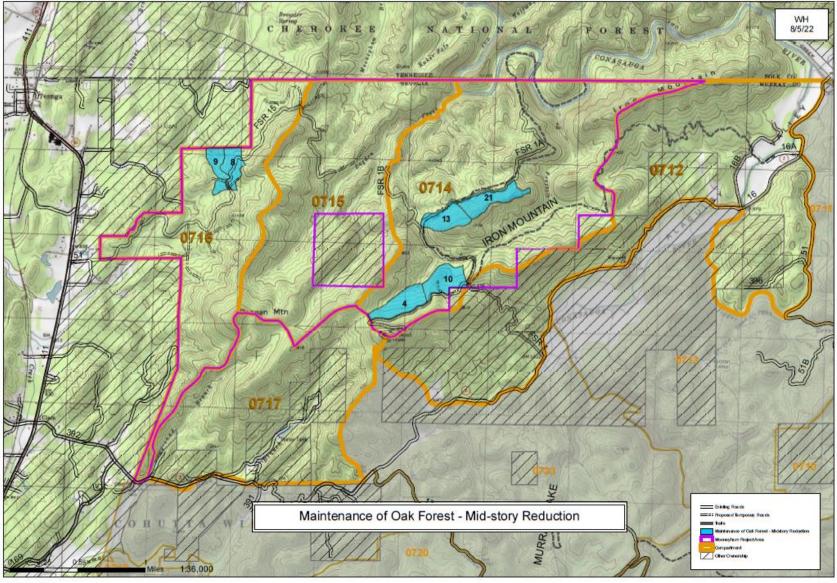
Comp 714 Stand 13 - 31 ac white oak-northern red oak-hickory stand, 136 years old – site index 66 Comp 714 Stand 21 - 36 ac white oak-northern red oak-hickory stand, 135 years old – site index 62 Comp 716 Stand 8 - 28 ac chestnut oak-scarlet oak-yellow pine stand, 109 years old – site index 58

714/13 and 21 fall in the proposed Iron Mountain burn. 716/8 falls in the Mooneyham burn. Proposed treatment includes herbicide application to midstory vegetation \leq 8" DBH. Roads and existing/proposed fire line locations will be buffered so as not to be affected by this treatment.

Watershed(s) (6th-level HUC) where activity is planned:

These stands are in the Perry Creek-Conasauga River HUC - #031501010105 and the Ball Play Creek — Conasauga River HUC - #031501010103. Both are Priority Watersheds.

MRx(s) where activity would occur: 9.H Management, Maintenance and Restoration of Plant Associations and 7.E.2 Dispersed Recreation Areas with Vegetation Management
Resource Project Design Features: Do project activities follow all listed resource-specific PDFs in Step 2?
Yes
Additional Project Design Features: Add any additional Project Design Features necessary to avoid significant impacts. Use list at end of this plan in Attachment A to guide selection of all that apply. List PDF numbers.
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Mooneyham Implentation Area - Foothills Landscape Project



Activity Name: Commercial and non-commercial thinning of pine plantations to improve forest health – non-commercial thinning

Detailed Description:

<u>Existing Condition (Need)</u>: Within the Foothills Project area, there are nearly 25,000 acres of immature pine plantations highly vulnerable to pine bark beetle infestations due to overstocked stand conditions (Basal Areas > 120 ft2/acre).

<u>Desired Condition:</u> Stocking/density in pine plantations are reduced to levels that make them more resilient to pine bark beetle infestations (Forest Plan Objective 40.1)

Known Conditions that Trigger Restoration Actions: Young, overstocked, even-aged pine stands susceptible to forest pest (i.e., ips, bark beetle) outbreaks. WUI (within ¼ mile of USFS boundary at High or Moderate Risk level) would be prioritized when applicable.

<u>How to Implement Change:</u> The project would improve forest health in overstocked pine stands, and would focus on young, overstocked, even-aged pine stands that were established during the last half-century. Pre-commercial thinning reduces stocking, improves site resources and the health and vigor of residual trees.

Stands Proposed for Treatment:

Comp 716 Stand 19 – 39 ac loblolly pine stand – the portion of this stand that falls south of the road

experienced a beetle infestation that caused overstory mortality. The edges of the stand have 84year-old loblolly and shortleaf pine, but the center of the stand is in regeneration, with very tightly clustered pine and hardwood regrowth. The northern portion of the stand falls in the Mooneyham prescribed burn. It is trending towards a woodland condition. A non-commercial thin is proposed to reduce competition and increase growing space for remaining pine and oak saplings in regenerating portions of the stand. This is an opportunity to determine stand composition and ensure there is an oak component to the future stand as well as



Comp 716 Stand 19 proposed for non-commercial thin

selecting existing shortleaf over loblolly whenever possible, creating a more fire-tolerant, resilient forest. The non-commercial thinning treatment would be a manual slash down treatment using chains saws to release around selected leave-trees.

Foothills Landscape Project Pre-Implementation Process Guide and Checklist

Watershed(s) (6th-level HUC) where activity is planned:

These stands are in the Perry Creek-Conasauga River HUC - #031501010105 which is a priority watershed.

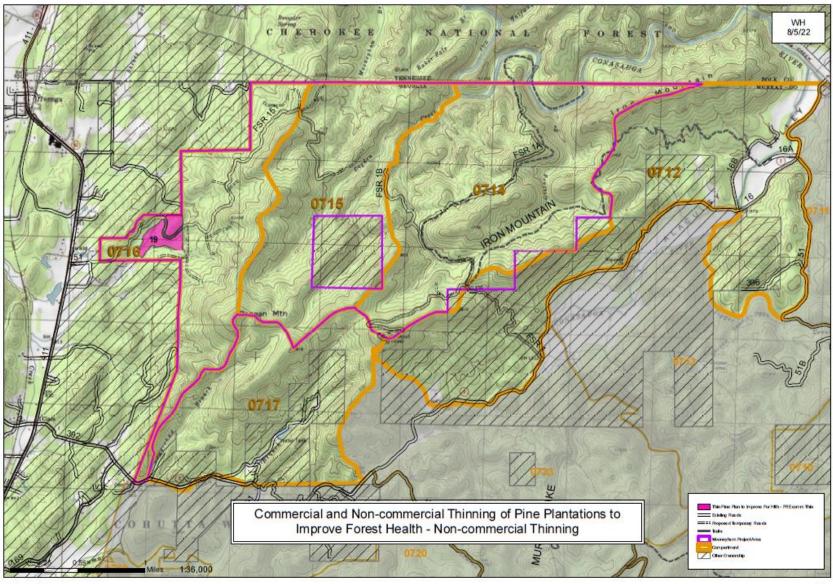
MRx(s) where activity would occur: 9.H Management, Maintenance and Restoration of Plant Associations

Resource Project Design Features: Do project activities follow all listed resource-specific PDFs in Step 2?

☑ **Yes** ☐ **No** (If no, document if additional analysis per NEPA is triggered and if so, analysis is referenced and/or attached prior to finalization.)

Additional Project Design Features: Add any additional Project Design Features necessary to avoid significant impacts. Use list at end of this plan in Attachment A to guide selection of all that apply. List PDF numbers.

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Mooneyham Implentation Area - Foothills Landscape Project



Activity Name: Replacement of culverts, fords, or bridges to increase aquatic organism passage and function

Existing Condition (Need): Culvert assessments were completed on 2 culverts on Bogden Creek and 3 on Perry Creek and all are significant or severe barriers to aquatic organism passage (AOP). Both Bogden and Perry Creek are Conasauga River tributaries with important endemic fish fauna.

Desired Condition: Increase aquatic connectivity in cold and warm water streams (Forest Plan Objective 26.3) by decreased number of barriers to AOP.

Known Conditions that Trigger Restoration Actions: High priority culvert locations with AOP barriers.

How to Implement Change: The replacement of culverts which are barriers to aquatic organism passage (AOP) with appropriate structures (bottomless culverts, bridges, or low-water fords) in conjunction with other treatments, i.e., stream habitat and road improvement projects is proposed on up to 3 locations. These projects require extensive and expensive engineering design and construction costs, therefore they would be repaired as funding permits on a priority basis. NOTE: there are severe barriers on Perry Creek and an unnamed tributary on private property off Douthitt Circle, just outside the National Forest boundary.



AOP candidate on Perry Creek @ FS Road 151. This culvert is a significant barrier to aquatic organism passage.

Watershed(s) (6th-level HUC) where activity is planned:

The Perry Creek culverts are in the Perry Creek-Conasauga River HUC - #031501010105. The Bogden Creek culverts are in the Ball Play Creek — Conasauga River HUC - #031501010103. Both of these are Priority Watersheds.

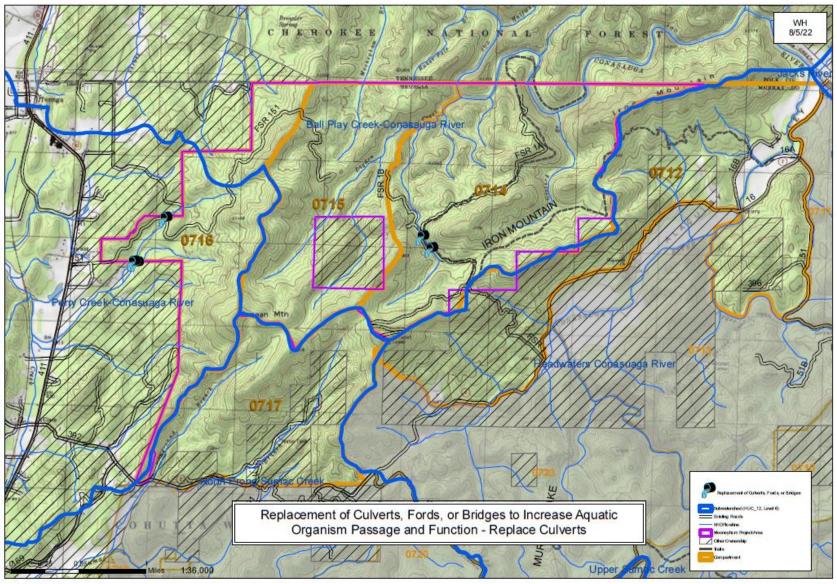
MRx(s) where activity would occur: The culverts on Perry Creek are in MRx 9.H Management, Maintenance and Restoration of Plant Associations, those on Bogden Creek are in 7.E.2 Dispersed Recreation Areas with Vegetation Management

Resource Project Design Features: Do project activities follow all listed resource-specific PDFs in Step 2?

✓ **Yes** □ **No** (If no, document if additional analysis per NEPA is triggered and if so, analysis is referenced and/or attached prior to finalization.)

Additional Project Design Features: Add any additional Project Design Features necessary to avoid significant impacts. Use list at end of this plan in Attachment A to quide selection of all that apply. List PDF numbers.

Foothills Landscape Project Pre-Implementation Process Guide and Checklist





Mooneyham Implentation Area - Foothills Landscape Project



Activity Name: Prescribed fire in new burn blocks to facilitate restoration or maintenance of fire-adapted ecosystems or to reduce hazardous fuels

Detailed Description:

<u>Existing Condition (Need)</u>: Approximately 84% of lands within the Foothills Project currently fall under FCC3 and are characterized by fire regimes that are significantly altered from their historical range. These lands are at a high risk of losing key ecosystem components. A large majority of this area are not covered by existing burn units.

<u>Desired Condition:</u> Expand the role of fire to recover and sustain healthy, fire-adapted ecosystems as much as possible, as a natural process (Forest Plan Goal 61).

<u>Known Conditions that Trigger Restoration Actions:</u> Where prescribed burning is required or preferred to meet restoration silvicultural objectives and can be accomplished safely outside of existing burn blocks

How to Implement Change: Prescribed fire would be used on the Foothills Landscape (in conjunction with silvicultural treatments when appropriate) to trend vegetation toward FCC2 or 1 and increase resiliency of forests and reduce susceptibility to insect & disease and/or stand-replacing wildfires. All actions would be similar to using prescribed fire within existing burn blocks. New prescribed fire burn units may be incorporated into the Foothills Landscape based on proposed vegetation management activities. Burning in mesic stands as is not considered part of this action. The proposed action does not include burning, either as a primary action or a connected action, for mesic stands (See Table 17). While a mesic stand could be included within a burn block, the burn plan objectives, and the parameters set within that plan, decrease the risk that these mesic forest types would burn inadvertently.

Three new prescribed burns are proposed in the project area (958 acres):

- Iron Mountain burn 845 acres
- Mooneyham Extension burn 56 acres
- Halfway Branch burn 57 acres

The Mooneyham IA has a history of summertime natural fire ignitions. These summertime wildfires show a resistance to control and can result in mortality of the overstory. The IA contains many examples of fire-adapted vegetation, including populations of the rare eastern turkeybeard.

The Iron Mountain burn unit is bounded by the Conasauga River to the North, East, and Southeast. This unit will require new fire line construction east of FSR 16B in addition to using the Iron Mountain trail as new fire line. East of FSR 16B, the line will follow what appears to be an old roadbed/railroad bed. This will need to cleared and scraped to be utilized as a fire break. Directly at the state line where this feature ties into the Conasauga River there appears to be the foundation of a bridge. All new line construction has been submitted to the Forest Archeologist for heritage survey.

The planning of the Iron Mountain RX unit requires Cooperation with the Cherokee National Forest as a portion of the unit extends north into Tennessee across the Forest Boundary. This occurs because the northern boundary of the unit is the natural barrier of the Conasauga River, reducing the amount of dozer line necessary for the burn. The Cherokee National Forest also has a burn unit that extends south

into Georgia due to utilization of the Conasauga River as its southern boundary. The Cherokee National Forest will complete NEPA for the portion of the Iron Mountain Prescribed fire unit extending into Tennessee.

In July of 2022, the 89-acre Iron Mountain wildfire was started at the summit of Iron Mountain in the Iron Mountain Rx burn block, presumably by lightning strike.

The Mooneyham Extension burn will require new dozer line to be constructed along the northwest boundary, western boundary, and southwest boundary. Perry Creek will be used as the eastern boundary of the burn. This expansion of the existing Mooneyham burn will reduce fuel loads next to the forest boundary that borders homes and private property. It will also include a proposed shortleaf restoration stand that will benefit from prescribed fire in order to restore native shortleaf forest.

The Halfway Branch Rx includes only portions of the Cherokee National Forest's Halfway Branch burn that cross the state line into Georgia and onto the Chattahoochee National Forest. Like the portion of the Iron Mountain burn that crosses into Tennessee, the Halfway Branch burn uses the Conasauga River as its boundary.

Connected actions for all new and existing prescribed burns include maintaining



Kevin Vasalinda, engineering technician and firefighter, cuts fire line around the 2022 Iron Mountain wildfire

approximately 3.3 miles of existing fire line as well as 5.2 miles of new fire line construction. Of the new fire line construction, 4.1 miles is concurrent with the existing Iron Mountain trail.

New and existing fire lines would be bladed with a dozer to create a fuel break or leaf litter would be blown with a blower. In riparian areas, line construction is limited to hand tools and blowers. Fire lines may be improved using a masticator immediately adjacent to the line location to reduce fuel build up next to the line.

Watershed(s) (6th-level HUC) where activity is planned:

The Iron Mountain and Halfway Branch burns are in the Ball Play – Conasauga River HUC #031501010103. The Mooneyham Extension burn is in the Perry Creek – Conasauga River HUC - #031501010105. Both are Priority Watersheds.

Foothills Landscape Project Pre-Implementation Process Guide and Checklist

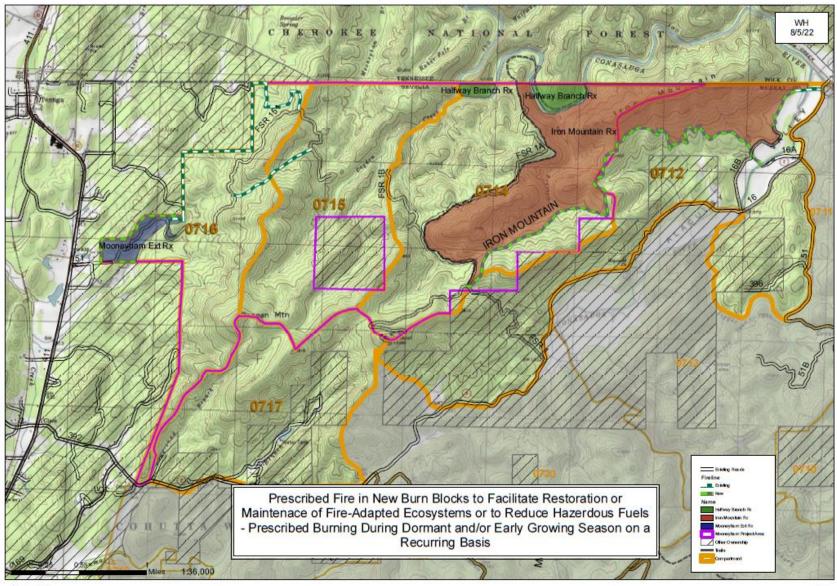
MRx(s) where activity would occur: Mooneyham Exp - 9.H Management, Maintenance and Restoration of Plant Associations, Iron Mountain - 7.E.2 Dispersed Recreation Areas with Vegetation Management and 2.B.1 Recommended Wild River Segments, Halfway Branch − 2.B.1 Recommended Wild River Segments

Resource Project Design Features: Do project activities follow all listed resource-specific PDFs in Step 2?

▼ Yes □ No (If no, document if additional analysis per NEPA is triggered and if so, analysis is referenced and/or attached prior to finalization.)

Additional Project Design Features: Add any additional Project Design Features necessary to avoid significant impacts. Use list at end of this plan in Attachment A to guide selection of all that apply. List PDF numbers.

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Mooneyham Implentation Area - Foothills Landscape Project



Attachment A: Additional Project Design Features

PDF Number: Location or Condition	Project Design Features Rest Management Practices and Standards			
	No herbicide is ground applied within 100 feet of lakes, wetlands, streams, except for aquatic-labeled herbicides to prevent significant environmental damage	Forest Plan Standard FW-022		
	Herbicide mixing, loading, or cleaning areas in the field are not located in sensitive areas as identified in the project decision document, or within 200 feet of private land, open water, or wells (or ephemeral streams FW-024)	Forest Plan Standard FW-023		
PDF 1: All Restoration Actions that Use Herbicides	No soil active herbicide with a half-life longer than three months is broadcast within 25 feet of ephemeral streams. Selective treatments with aquatic-labeled herbicides are allowed. Such areas are clearly marked before treatment so that applicators can easily see and avoid them.	Forest Plan Standard FW-025		
	Site-specific analysis of proposed management actions will identify any protective measures needed in addition to Forest Plan standards, including increasing the width of protective buffers where needed.	Forest Plan Standard FW-029		
	Milkweed species would be avoided during herbicide spraying.	FLP Specific		
	Pesticide Use – See Appendix B, Attachment 1 of the Vegetation Specialist Report	FLP Specific		
PDF 2: Old growth stands, at the time of implementation, that meet minimum age criteria for old-growth based on Old-Growth Type	Non-conserved "possible old-growth", defined as stands meeting the minimum age criteria for their respective Old-Growth Type that are not currently conserved by Management Prescription or through small block allocations associated with this alternative, would be assessed prior to implementation of project activities within these areas to determine if they meet the other defining criteria for old-growth conservation. If so, these areas would be conserved for old- growth. Management actions that conflict with old-growth characteristics, as described by the Forest Plan, would not be permitted in areas conserved. The exception would be for Old-Growth Types 22 and 24.	Forest Plan Standard (FWS – 046 FWS – 054)		
PDF 3: All vegetation management actions in all conditions	During all vegetation management activities, dogwoods and other soft-mast producers would be reserved from treatment, where practicable and to the extent compatible with meeting treatment objectives	Forest Plan Standard (FWS – 008) and FLP Specific		
PDF 4: All vegetation treatments that include Oak regeneration	Oak-dominated forest types on mesic sites would not be converted to pine-dominated cover types, but could be managed as mixed oak-pine forest types	Forest Plan Standard (FWS – 004)		
(2,000 acres) or mesic hardwood regeneration (500 acres) treatments	For areas proposed for mesic hardwood regeneration to create young forest habitats, regeneration treatments would be limited to yellow poplar-dominated stands or stands dominated by other non-oak cover hardwood associates. This would include Forest Types 50, 56, 58 and/or 41.	FLP Specific		
PDF 5: All vegetation treatments that include regeneration harvests (yellow pine restoration, oak restoration, oak regeneration, mesic hardwood regeneration)	When regeneration treatments are applied, sites would be regenerated to native tree species that commonly occur or historically occurred naturally on ecologically comparable sites within the same ecological section.	Forest Plan Standard (FWS – 001)		
	Stands dominated by Eastern hemlock would not be subject to regeneration treatments.	Forest Plan Standard (FWS – 002)		
	Even-aged or two-aged regeneration areas in or adjacent to deciduous or mixed forests must include a 50-foot zone along mature forest edges in which intensity of silvicultural treatment decreases, resulting in a feathered edge.	Forest Plan Standard (FWS – 007)		

PDF Number: Location or Condition	Project Design Features, Best Management Practices, and Standards	Origin	
	The maximum size of an opening created by even-aged or two-aged regeneration treatments is 40 acres. For yellow pine, 80 acres is permitted if restoration requires larger openings.	Forest Plan Standard (FWS – 086)	
	Openings created by even-aged regeneration or two-aged regenerations harvest units shall be separated from each other by a minimum of 330 feet (5 chains). However, such openings may be clustered closer than 330 feet as long as their combined acreage does not exceed the maximum opening size (40 acres). An opening created by regeneration harvest would no longer be considered an opening when the re-established stand reaches five years in age.	Forest Plan Standard (FWS – 087)	
	Regenerated stands shall meet the minimum stocking standards for the intended/desired forest type within five years after final harvest cut, as listed in the Forest Plan Table 2-5.	Forest Plan Standard (FWS – 089)	
	In even-aged and two-aged regeneration, retain all snags unless they are an immediate hazard. Sales would be designed to avoid snag removal if possible (skid trails, landings). Retain (or create) five snags per acre: near the forest edge if possible. In even-aged and two-aged regeneration stands larger than 10 acres, maintain a minimum of 15 sq. feet of basal area. These could be arranged in clumps, corridors, or feathered edges. In stands over 10 acres treated as seed tree or shelterwood, maintain a minimum of 20 sq. feet of basal area. Retain all trees within 20 feet of five snags per acre for windthrow protection and snag recruitment	Forest Plan Standard (FWS 091).	
PDF 6: All Prescribed Fire in all Conditions	When necessary, to include mesic deciduous forests within prescribed burning blocks as part of burning other adjacent fire-dependent forest types, only low intensity fires are permitted, except when prescribed burns are designed to encourage oak regeneration in mesic oak forests. Exclude such mesic areas lacking a significant oak component from burn units, unless by doing so, it would result in: (1) failure to meet other prescribed fire objectives, or (2) more than 30% increase in plowed or bladed fire-line construction per burn unit.	Forest Plan Standard (FWS – 191 and FSW – 0190)	
	Skidding would not occur within riparian corridors, except for at designated crossings.	GA BMP	
	No heavy equipment, other than mechanical fellers, would be allowed to operate within the riparian corridors during harvest activities. The exception to this would be at designated crossings.	GA BMP	
PDF 7: All mechanical vegetation management	Once the temporary roads, log landings, and skid trails are no longer needed, they would be closed to normal vehicle traffic so that illegal use is discouraged. The closures may include installation of an earthen barrier, re-contouring, decompaction, placement of logging debris along the road surface, seeding or placement of boulders.	FLP Specific	
	Log landings and skid trail locations would be evaluated and approved by the Forest Service prior to harvesting in order to ensure that they are placed in locations with adequate drainage and away from sensitive soils or riparian areas as per the Georgia State BMP recommendations.	FLP Specific	
	Skidding and decking would be limited to designated and approved routes along ridges and gentle slopes to protect sensitive soils. Skidding would not be allowed on sustained slopes over 35%. Coordination will be completed when skid trails and decking coincide with system trails.	FLP Specific	

PDF Number: Location or Condition	Project Design Features, Best Management Practices, and Standards	Origin	
	No tree removal may occur within 0.25 mile of a known NLEB hibernaculum at any time of the year (NLEB 4d rule) unless agreed to during consultation with U.S. Fish & Wildlife Service	FLP Specific (ESA Consultation)	
	No tree removal may occur within a 150-foot radius of known, occupied NLEB roost trees during June or July each year (NLEB 4d rule) unless agreed to during consultation with U.S. Fish & Wildlife Service	FLP Specific (ESA Consultation)	
	Protect known Indiana bat or other endangered bat roosts from cutting or modification until they are no longer suitable as roost trees.	Forest Plan Standard FW-233	
	Snags are not intentionally felled from April 1 through August 31 (exceptions may be made for safety, insects, and disease).	Forest Plan Standard FW-235	
	Non-silvicultural projects removing trees or snags (fireline construction, rec projects, hazard tree removal) should be completed during September 1-March 31. This applies to the parts of the forest that provides "suitable" habitat for Indiana bat roosting (GIS analysis).	Forest Plan Standard FW-236	
	In all silvicultural treatments, retention priority is given to the largest available trees with favorable characteristics as bat roost trees (yellow pines and oaks with crevices, cracks, or hollows).	Forest Plan Standard FW-237	
	Compliance with standards FW-90, 91, 233-237 will be monitored and report submitted annually to USFWS. Report will include acres of timber harvest and prescribed burning; time of year accomplished.	Forest Plan Standard FW-238	
	Mature forest cover is maintained within 100 feet from the top of cliffs and 200 feet from the base of cliffs.	Forest Plan Management Prescription 9.F-017	
	Vegetation management activities would not utilize existing trails as access routes without a review by recreation staff. Trails used would be restored to the original trail width and characteristics if determined appropriate per sustainable recreation objectives. Blaze trees that define the trail corridor would not be cut unless to mitigate safety concerns.	FLP Specific	
	Layout of regeneration areas would incorporate a no-harvest zone between unit boundaries and open Forest system roads that have a HIGH scenic integrity objective.	FLP Specific	
	Layout of regeneration areas by design would leave areas un-harvested along prominent ridgelines and/or sites of higher elevation that have a HIGH or MODERATE scenic integrity objectives to reduce "sky-lighting" effects and to obscure areas of lower elevation in regeneration.	FLP Specific	
	Logging equipment must be inspected and found to be clean (free of vegetative debris) seed, soils, etc. upon arrival to timber sale areas.	FLP Specific	
	Known NNIS infestations must be shown on timber sale area maps. Ensure that equipment washing clauses are included in all ground-disturbing contracts and sales documents, and that clauses are discussed in pre-work conferences.	FLP Specific	
	When possible, significant infestations of NNIS along planned access routes would be pretreated systematically within timber sale areas in order to prevent the spread of NNIS into new areas.	FLP Specific	
	Skidding through known populations of NNIS should be avoided to reduce the potential for spread.	FLP Specific	
PDF 8: All mechanical vegetation	Coordinate with district recreation staff to post advance notices when trails or recreation sites are to be closed during harvest operations and prescribed burning.	FLP Specific	
and prescribed fire treatments	Trails treads, roads, or facilities would be rehabilitated to pre-existing condition if damaged during project operations, in coordination with district recreation staff.	FLP Specific	

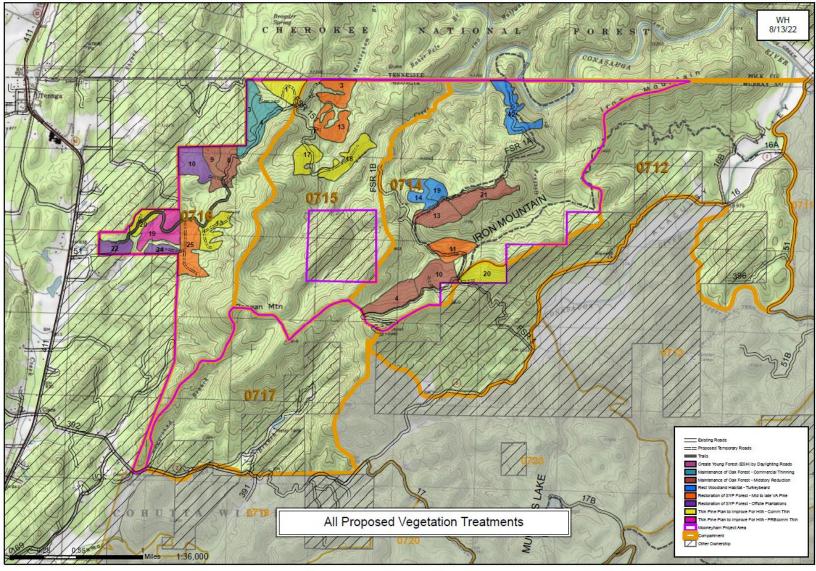
PDF Number: Location or Condition	Project Design Features, Best Management Practices, and Standards	Origin	
	Vegetation treatments that occur within or adjacent to developed sites, dispersed sites, or trails would be coordinated with local recreation /facility staff to protect facility and lessen impacts to visitors to the extent possible. Project activities that occur within or adjacent to developed sites, dispersed sites, or trails would be conducted outside the major use season whenever possible, with the understanding that most facilities are open year-round. Developed sites will be temporarily closed for visitor protection during active operations. Portions of sites and trails may be temporarily closed for visitor protection or possible restrictions placed on silvicultural activities during times of high use.	FLP Specific	
	Where possible, while implementing proposed treatments, make improvements within recreation sites and along system trails. Examples include cleaning up logs and debris from past projects, removing hazard trees surrounding developed sites, and/or cutting existing stumps to less than six inches.	FLP Specific	
	Harvest facilities such as temporary roads and landings, and fireline construction will be assessed for continued use to meet other resource needs (i.e., additional trailhead parking, loop trails, wildlife openings, etc.)	FLP Specific	
	Minimize the amount and concentration of smoke entering populated areas; prevent/minimize public health and safety hazards, including impacts to sensitive sites (schools, hospitals, etc.), visual impacts on highways, airports, etc. (both day and night); avoid exceedances of the National Ambient Air Quality Standards (NAAQS); and protect visibility in Class 1 areas	USDA Forest Service Southern Region's Smoke Management Guidelines	
	All activities will meet the requirements of applicable regulations established in pursuit of state or federal air quality goals. While the Forest Service cannot unilaterally guarantee the quality of air (generally, or at a specific point) within an airshed, it does ensure that its management activities would be conducted with full adherence to pollution control methodologies and technologies prescribed by air quality regulatory agencies.	Forest Plan Standard FW-230	
	In leases and other agreements that permit other parties to use Forest land or resources, the Forest Service will require the permittee to meet the requirements of all applicable regulations established in pursuit of state or federal air quality goals.	Forest Plan Standard FW-231	
PDF 9: Prescribed Fire Treatments in all Conditions	The Forest Service will assess relevant aspects of air quality within the Forest, either through its own efforts, in cooperation with other agencies, or by review of the results of other agency monitoring in/near the Forest.	Forest Plan Standard FW-232	
	Adhere to Forest Service Manual 5100 Wildland Fire Management, Chapter 5140 Hazardous Fuel Management and Prescribed Fire, Chattahoochee-Oconee Supplement, as amended, regarding parameters to consider when developing a prescribed fire burn plan. Parameters include, but are not limited to: fuel moisture, relative humidity, wind speeds, Keetch-Byram Drought Index (KBDI), days since rain, temperatures, and probability of ignition.	Forest Service Manual 5100 Wildland Fire Management, Chapter 5140 Hazardous Fuel Management and Prescribed Fire, Chattahoochee-Oconee Supplement R8-5100-2009-1	
	Basic mesic forests are excluded from prescribed burning blocks where this can be accomplished without large increases in fireline construction. When necessary, to include mesic deciduous forests within burning blocks, direct firing will not be done within these communities unless necessary to secure control lines. In these cases, only low intensity fires are allowed.	Forest Plan Management Prescription 9.F-016	
	Locate and construct firelines to minimize mineral soil exposure by utilizing natural barriers, installing firebreaks along the contour, installing proper water diversions, and using gradual grades as outlined in the Forest Plan and Georgia's BMP Handbook. Establish a vegetative	GA BMP	

PDF Number: Location or Condition	Project Design Features Rest Management Practices and Standards			
	cover as soon as possible to reduce erosion and sedimentation.			
	Prescribed burn plans written for areas near caves or mines that contain bats identify these sites as smoke sensitive targets and plan to avoid smoke entering cave or mine openings when bats are present.	Forest Plan Standard FW-034		
	Implement current Georgia Rules and Regulations for Water Quality Control (Chapter 391-3-6) for all projects as a minimum to meet water quality objectives. GA BMPs for Forestry would be met or exceeded to meet water quality objectives for all activities. Consistent with GA BMP (2019 p. 21), silvicultural activities should: • Minimize soil disturbance, litter layer removal, and avoid high-intensity fire within ephemeral areas. These activities can increase the possibility of introducing pollutants to intermittent or perennial streams. • Cover inadvertently exposed soils with logging debris, grass, or mulch. • Minimize equipment trafficking within and around ephemeral areas. Should trafficking be justifiable due to site constraints, take precautions to minimize soil disturbance and litter layer removal. Placement of logging debris or logging mats in traffic areas may be appropriate. Debris, mats, and other soil protecting structures should not interfere with the natural flow of water. • Avoid direct tie-in of turnouts and outfall of water bars/breaks to ephemeral areas. Extra care should be taken where a skid trail crosses an ephemeral area.	Forest Plan Standard FW- 070, GA BMPs		
PDF 10: All activities within Ephemeral Zones (the area within 25 feet on either side of	Motorized vehicle use in ephemeral stream zones is restricted to designated crossings. Motorized vehicles are allowed outside designated crossings on a case-by case basis when vehicle entry would create less ground disturbance than cable winching.	Forest Plan Standard FW-077		
ephemeral streams)	Partial suspension is required when yarding logs over ephemeral streams, unless an improved crossing is used, e.g., culvert or bridge.	Forest Plan Standard FW-079		
	Temporary culverts or bridges will be used to cross ephemeral streams where needed to protect channel stability or minimize erosion or scouring. Culverts will be removed when activities are completed, and the ephemeral stream zone will be restored to a natural condition. Stabilize disturbed soils at crossings.	Forest Plan Standard FW-082		
	Recreation trails, campsites, and other permanent recreational developments are located, designed, and constructed outside the ephemeral stream zone (25 feet on each side). Those causing unacceptable resource damage will be closed and/or rehabilitated.	Forest Plan Standard FW-083		
	Use fuel-break construction and/or mitigation methods that: (a) leave the root mat intact; (b) do not leave bare mineral soil exposed, and © do not create landforms that will drain directly into ephemeral streams for 25 feet on either side of ephemeral streams. Such methods include wet lines or use of existing constructed or natural barriers. If fuel-break construction results in breaking the root mat and thus exposure of bare mineral soil and connection to an ephemeral stream, restore the fire break for 25 feet on each side of the stream with reshaping the soil surface and placing a soil cover in a timely manner to minimize erosion.	Forest Plan Standard FW-084		
PDF 11: All heavy mechanical equipment use in parking lot activities	Operators should drive, operate, and store heavy equipment only within the proposed development footprint or the disturbed corridors of the surrounding roads and parking areas, so as to limit soil compaction and vegetation cover loss in the surrounding area. Additionally, bulldozer debris and excavated material from grading and digging operations should not be pushed into the surrounding natural forest areas. Construction should be designed and completed with no additional impacts to the riparian area.	FLP Specific		
PDF 12: All heavy mechanical	Soil rutting should be kept to a minimum.	Regional soil standard		

PDF Number: Location or Condition	Project Design Features, Best Management Practices, and Standards	Origin	
equipment uses	Compaction in an activity area should not exceed a 15% increase in bulk density in the upper 8 inches of the soil.	Regional soil standard	
PDF 13: Mastication activities	The operator should try to move in a straight direction. Pivot turns should be kept to a minimum and turns should be conducted in a broad arc as the surrounding terrain and timber would allow in order to minimize soil disturbance. Care should be taken to avoid moving over the same piece of ground more than three times or use areas that have already been compacted through other activities.	FLP Specific	
	Temporary roads would follow the general contour as practical and would generally not exceed sustained grades over 10%.	GA BMP	
DDE 44. Tamaramana	The travel way of temporary roads would generally not exceed 14-16 feet except at turnouts and landings.	GA BMP	
PDF 14: Temporary road construction	Drainage structures, such as out sloping and water bars, would be installed along temporary roads when the use of the road is no longer needed.	GA BMP	
	Temporary roads would be constructed on previous existing routes (old woods roads, skid trails, system trails) where possible to minimize the need for new temporary road construction.	FLP Specific	
PDF 15: Timber harvest activities within the riparian corridor	Establish Streamside Management Zones (SMZ) on both sides of designated trout streams and tributaries according to the following options: Option A: For perennial trout streams and tributaries, a minimum 100-feet SMZ that includes a no-harvest zone within the first 25-feet of primary or secondary trout streams. Timber harvests within the remaining 75-feet of the SMZ should leave an average of 50 square ft of basal area per acre or at least 50% canopy cover. Option B: For perennial trout streams and tributaries within the 100-ft. SMZ, leave an average of 50 square feet of basal area per acre evenly distributed throughout the zone to provide shade. Option B may be selected if a qualified professional is consulted. Option C does not apply to CONF. The minimum CONF riparian corridor is 100 feet.	GA BMP	
	Major actions that create long-term impacts are prohibited in the riparian corridor. Examples are roads or trails (excluding designated crossings), recreation sites and facilities, log landings, and permanent wildlife openings. Existing examples of the above are permitted if not causing environmental damage.	Forest Plan Standard 11-001	
PDF 16: All activities within Riparian Corridor	Minor actions that create short-term impacts are permitted in the riparian corridor with appropriate mitigation and monitoring of impacts. Examples of minor actions include silvicultural activities needed to meet resource objectives for riparian-associated species, bank stabilization, temporary road construction and stream crossings associated with these activities.	Forest Plan Standard 11-002	
	For all projects, additional protection, such as wider riparian corridor distances, higher residual canopy cover, restrictions on activities, etc. will be identified through site-specific inventories and surveys, site-specific biological evaluations, and site-specific mitigations identified in project NEPA documents.	Forest Plan Standard 11-003	
	Silvicultural activities conducted within the riparian corridor will be conducted to meet or exceed compliance with the current edition of GA BMPs for Forestry	Forest Plan Standard 11-022	
	Tree removals may only take place (in the riparian corridor) if needed to enhance the recovery of the, rehabilitate disturbances, provide habitat for T&E, RFSS, or riparian-associated species, reduce fuel buildup, provide for visitor safety, or for approved facility	Forest Plan Standard 11-024	

PDF Number: Location or Condition	Project Design Features, Best Management Practices, and Standards	Origin
construction/renovation		
PDF 17: Culvert and/or bridge maintenance, removal, or	Culverts and bridges (and any other man-made structure) would be surveyed for roosting bats before they are removed or modified, and if significant bat roosting is found, the structure would be maintained, or alternative roosts made available prior to removal or destruction	Forest Plan Standard FW-035
modification	Culverts that are barriers to stream biota passage in waters of aquatic Threatened, Endangered, and Sensitive species have priority for replacement over culverts in waters without Threatened, Endangered, and Sensitive Species.	Forest Plan Standard FW-042
	In salvage timber sales, all live den trees and an average of 5 of the largest suitable snags (snags with exfoliating bark) per acre will be retained. Snags in early stages of decay should be favored over older snags for retention. Snags should be clumped if possible.	Forest Plan Standard FW-090
PDF 18: Timber sales	In even aged and two aged regeneration, retain all snags unless they are an immediate hazard. Sales will be designed to avoid snag removal if possible (skid trails, landings). Retain (or create) 5 snags per acre, near the forest edge if possible. In even-aged and two-aged regeneration stands larger than 10 acres, maintain a minimum of 15 sq. feet of basal area. These can be arranged in clumps, corridors, or feathered edges. In stands over 10 acres treated as seedtree or shelterwood, maintain a minimum of 20 sq. feet of basal area. Retain all trees within 20 feet of 5 snags per acre for windthrow protection and snag recruitment.	Forest Plan Standard FW-091
For caves and mines suitable of supporting cave-dependent species, a minimum buffer 200 feet is maintained around portals. Prohibited activities within this buffer include use wheeled or tractor vehicles (except on existing roads or for cave protection and maintenance), mechanical site prep, vegetation cutting, rec site construction, tractor-constructed firelines, herbicide application, and new road construction, skid trails, and lo landings.		Forest Plan Management Prescription 9.F-021
PDF 20: All vegetation treatments that create young forest habitats (10,100 acres)	Within individual project areas to be implemented within the Foothills Landscape area, an assessment of existing acres of young forest habitats (stands less than 11 years old) would be made prior to implementation to determine the maximum amount of young forest that could be created. Such assessments would be tiered to the applicable Management Prescription allowances contained within each individual project IA. Young Forest habitats would not be created in excess of the maximum amounts allowed by each Management Prescription singly or combined.	FLP Specific (MRx compliance)
PDF 21: Any ground-disturbing activities	Botanical surveys would be completed in accordance with Forest risk assessments in suitable habitats for T&E and Sensitive species prior to any ground disturbing activities.	FLP Specific

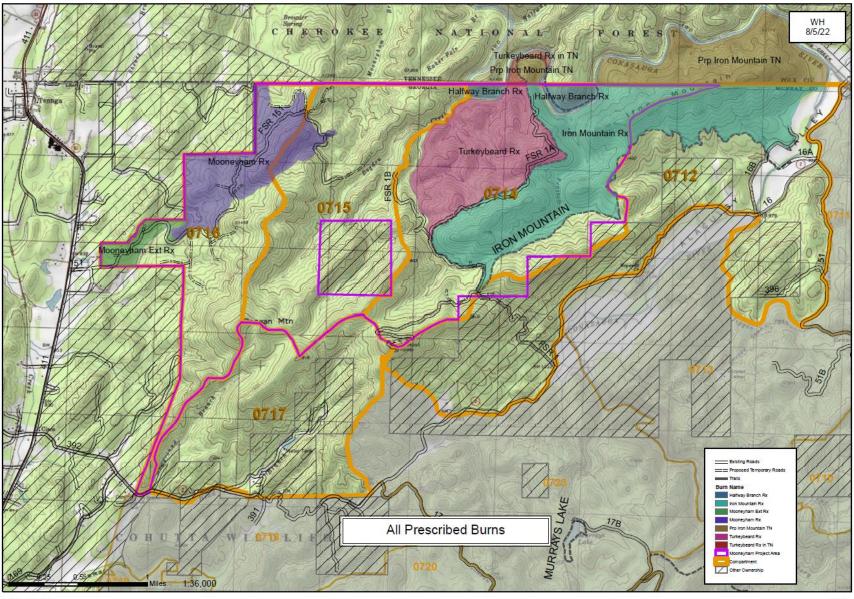
Attachment B: Additional Maps





Mooneyham Implentation Area - Foothills Landscape Project







Mooneyham Implentation Area - Foothills Landscape Project



Attachment C: Monitoring Plan for Mooneyham Implementation Area

Resource Assessed	Monitoring Question/Objective	Frequency	Field Method/Data Collection	Documentation Format	Primary Responsibility
Soil Productivity & Water Quality	Are Best Management Practices (BMPs) being implemented through timber sale contract provisions, and according to Forest Plan standards?	During operational periods (timber sales, site prep, road construction and maintenance)	Evaluate implementation of BMPs and timber sale contract provisions. All timber sale units are evaluated for implementation.	Timber sale inspection forms, filed in timber sale contracts, reviewed by FSR	District Timber Sale Administrator, Harvest Inspector, Forest Service Representative (FSR)
Soil Productivity & Water Quality	Are the Best Management Practices and applicable Forest Plan standards effective in meeting soil productivity and water quality standards?	During operational periods and within one year after operations end.	Field evaluation of the effectiveness of BMPs to meet Forest Plan standards. Random sample of harvest units using line transects & point samples	Field inspection forms, filed in S.O.	Interdisciplinary Team (Forest personnel in hydrology, soils, timber)
Best Management Practices Implementation – Audit by GFC	Were Best Management Practices implemented per Georgia's Forestry BMP Handbook and effective in protecting water quality?	During operational periods and within one year after operations end.	Field evaluation of randomly selected harvest units and prescribed burns by Georgia Forestry Commission water quality personnel. This occurs across the state on federal land as well as state and private ownership.	Completion of GFC Best Management Practice Audit Form, filed in state database	Georgia Forestry Commission Water Quality personnel

Resource Assessed	Monitoring Question/Objective	Frequency	Field Method/Data Collection	Documentation Format	Primary Responsibility
Revegetation of Disturbed Areas	Were the prescribed revegetation efforts on disturbed sites such as skid trails, landings, skid trails, and fire lines implemented and effective in establishing ground cover and erosion protection?	Within one growing season of revegetation operations.	Visual evaluation of disturbed areas that have been revegetated to assess that sites have been seeded and rehabilitated to ensure revegetation is successful.	Field visual inspection of random sample of revegetated areas, documented on timber sale inspection reports	Timber Sale Administrator
Non-Native Invasive Plants	Are NNIS populations present within planned harvest/activity areas prior to treatment?	During project preparation/layout	Field inventory and mapping of NNIS populations	Inventoried populations will be mapped and treatment planned. Populations identified though risk assessment process prior to implementation may be added to Sale Area Map as required by Foothills NNIS Risk Assessment	District Silviculturist, District Timber Management Assistant (TMA), Presale Forester, District Wildlife Biologist
Non-Native Invasive Plants	Identify NNIS in treated areas as required by Foothills NNIS Risk Assessment and treat new infestations	Up to five field seasons after harvest activities have been completed as required by Foothills NNIS Risk Assessment	Field inspections to identify establishment or spread of NNIS as required by Foothills NNIS Risk Assessment	Inventoried populations will be mapped and treatment planned.	District Silviculturist, District TMA, District Wildlife Biologist
Rare Plants	Are rare plant protections adequate to protect populations?	During timber sale layout and operational periods	Field inspection of known rare plant populations.	Timber sale inspection reports	Timber Sale Administrator, District Wildlife Biologist

Resource Assessed	Monitoring Question/Objective	Frequency	Field Method/Data Collection	Documentation Format	Primary Responsibility
Timber	Are timber harvest activities adhering to applicable Forest Plan standards?	Throughout the life of the timber sale contract	Field inspections through all phases of harvesting to ensure contract provisions are being met and implemented in compliance with the Forest Plan.	Timber sale inspection reports	Harvest Inspector, Timber Sale Administrator, Forest Service Representative, District Wildlife Biologist, District Timber Management Assistant
Reforestation	Are harvested stands regenerated and restocked within five years of harvest?	One and three years after planting trees, and at 5 years or later after site preparation has been completed with natural regeneration	Field evaluation of sample plots and/or field inspection will be used to determine stocking, composition and condition of regeneration.	Report documented in FACTS database	District Silviculturist
Heritage	Are Forest Plan standards effective in protecting cultural and heritage resources?	During and immediately after harvest activities	Field inspections of sites to ensure the protection or avoidance of heritage resources.	Timber sale inspection reports	Timber Sale Administrator, Archeologist